

ENCYCLOPEDIA
OF
BIBLE LIFE





1. From the Mount of Olives: Jerusalem, its Temple Area and eastern wall, with Kidron Valley below.

ENCYCLOPEDIA OF BIBLE LIFE

By
MADELEINE S. MILLER
and
J. LANE MILLER

FULLY ILLUSTRATED



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ENCYCLOPEDIA OF BIBLE LIFE

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D-Z

הננו מקדישים את הספר הזה לאלהים הנותן לנו בחסדו לגמר אותו.

מקדישין אנחנו ספרא דנה לאלה שמיא די הרשינא בחסדה
למגמרה.

Ἀνατίθεμεν τοῦτο τὸ βιβλίον τῷ θεῷ οὗ τῇ χάριτι τετέλεσται.

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P R E F A C E

SOMEWHAT in the spirit of early Greek Christians, we are dedicating this book to God, by whose grace it has been completed. To Dr. William Foxwell Albright we are indebted for writing this dedication in the three biblical languages, Hebrew, Aramaic and Greek.

God's provision of the rare set of circumstances which enabled us to go eight times to Palestine, armed with means for recording impressions; His opening of conservative museums to the lenses of our avid cameras; His calling into play for the compiling of certain pages the specialized knowledge of experts separated by thousands of miles; His preservation of our very lives for the accomplishment of this work despite serious illness in the midst of our four years of research—make any other dedication out of the question.

We emerge from our study pursued in the starry foredawn of gloomy winter months and hot dawns of torrid summer in the city with a tremendous enthusiasm for the Bible itself. Its picturesqueness, its living, spiritual realities impress us the more as we have plumbed it deeper. We do not marvel that from nine to twelve million copies of Bible and Scripture portions in 1,062 languages and dialects are sold per year; or that men in the munition-handling rooms of battleships shorten tedious hours by reading the Bible where they will not be interrupted; or that men without hope, on a battered life-raft, sustain life by reading aloud the pages of a weather-soaked New Testament.

To get the most out of our book, we suggest that you read it with a Bible close at hand—preferably, a cheap edition which you will not hesitate to underline. Only thus will you get a graphic realization of the social and religious backgrounds which we here present. The authors hope they can make your reading of the Bible as enjoyable as they have found it in the preparation of this work.

Our encyclopedia does not aim to be a work on biblical archaeology. But it has been written with an awareness of archaeology and of how this new science of ancient things illuminates the social and religious backgrounds of the people who gave us our Bible. We accept the point of view of Dr. Albright that to date nothing has been unearthed which seriously challenges the main trend of events recorded in Scripture. We see in biblical archaeology a blow to destructive criticism and believe that a balanced appreciation of the Bible will bless students who place textual criticism and archaeological findings side by side as they sincerely seek the beauty and the truths offered by sixty-six "little books," *Biblia*.

The Bible itself is a concrete, picture-filled book. Even chapters which are characteristically devotional are full of phrases as vivid as the people of the East

themselves are vivid. Consider the eighteenth Psalm, for example. This victory song praises Jehovah in terms of rock-fortresses, towers, shields, metal bows, lighted lamps, walls leaped over, flails beating out grain in windy weather, stones of hail, small feet of wild hinds upon the high places. Writers of Scripture were men of the open, observers of everyday life. In personal experiences they recorded their perception of God's eternal truths.

The authors of *An Encyclopedia of Bible Life* hope to make a significant contribution to visual biblical education by presenting to teachers, ministers, and students a compact source-book of fully illustrated information bearing upon the people whose faith and habits and skills produced the Scriptures. We especially direct attention to our sequence of pictures portraying landmarks of Jesus.

Our policy has been to answer the popular curiosities: What does it look like? How did it taste? How did they dress? With what did they make war? What were their trades? With what jewels did they adorn themselves? What were their cities, and what the products of their craftsmen's shops? Where and how did they lift their hearts to God in worship? We hope, indeed, to make our readers more curious about the stage on which the major events of Scripture took place than they have ever before troubled themselves to be. That stage includes scenes not only from Palestine, Transjordan, and Syria but also from Egypt, Mesopotamia, Asia Minor, Greece, and Italy.

Meeting, in travel, people who were going through Bible lands without comprehending what they saw, we determined that some day we should write a book which would guide people who were "going through" the Bible itself without visualizing what they were reading. Our study has grown out of a desire to make a little more intelligible, a book and a way of life too little understood by the Western world.

Our material is saved from irreverent humanism by the religious atmosphere of the text and the generous use of Scripture citations bearing upon the various topics—citations which should stimulate many sermons.

Much of the material has been tested by one of the authors as background for sermons in an influential metropolitan pulpit, and by the other in classes for religious education. We are aware of many necessary omissions. The double-column layout suggests the packing of as much material between our covers as possible.

The cooperation of many gracious individuals has set our book on its way. First of all, we thank Dr. William Foxwell Albright for his inspiring counsel, his patient answering of questions, and his general inspiration. Throughout the years between a memorable "archaeological" tea hour over which he presided at the American School of Oriental Research in Jerusalem, and his penning of the trilingual dedication of our book a few hours ago, this great Semitic language scholar of the Johns Hopkins University has never failed us. His generous spirit has hovered over our years of research and has granted liberal quotation from his own outstanding volumes in the field of biblical archaeology, including *From the Stone Age to Christianity* and *Archaeology and the Religion of Israel*. To the American Schools

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To the following busy scholars we are grateful for reading sections of our manuscript covering specialized fields: Dr. Robert Cushman Murphy, Chairman of the Department of Birds of the American Museum of Natural History; Dr. H. L. Ginsberg, Professor of Bible at the Jewish Theological Seminary of America, and his colleague, Rabbi Max Vorspan; Professor B. W. Binder, of the Department of Music of the Jewish Theological Seminary; Mr. Samuel M. Mosser, Librarian of the Museum of the American Numismatic Society; Miss Eleanor M. King, of the National Audubon Society; Mrs. R. E. Phillips, of the Egyptian Department of the Metropolitan Museum of Art; Dr. Chester C. McCown, Director of the Palestine Institute of the Pacific School of Religion; Dr. Henry H. Meyer, Dean Emeritus of the Boston University School of Religion and Social Work; Mrs. Elizabeth Riefstahl, Librarian of the Wilbour Library of the Brooklyn Museum; Rev. Puera Robison of the Knox School. We thank Sir Charles Marston for information concerning Lachish. We acknowledge, also, the courtesy of Mr. Leonard H. Robbins, of the *Sunday Magazine* of the *New York Times*, for allowing use of quoted matter; and of Mr. Robert Davis, for permission to use his lovely poem, "The Friendly Beasts." To Mr. Hans Holzer, Associate Editor of the *Numismatic Review*, go our thanks for his painstaking preparation of the plate of coins which circulated in Palestine in Bible times, and to "Stack's," owner of these coins. We appreciate information in re plants of Palestine by Dr. Harold Moldenke, Assistant Curator (on leave) of the New York Botanical Garden, and by Miss Marie-Louise Hubbard, of the Brooklyn Botanic Garden. Acknowledgment is made of the generous cooperation of the following museums in supplying photographs and information: the Museum of the University of Pennsylvania; the Oriental Institute of the University of Chicago; the Morgan Library; the Fogg Museum of Harvard University; the Metropolitan Museum of Art and especially Miss Hannah McAllister of its Near East Department; and the Brooklyn Museum. We acknowledge the courtesy of Ginn and Company in granting permission to reproduce the transportation chart from Breasted's *Ancient Times*; and of the University of Chicago Press in allowing us to reproduce photographs of Egyptian gods and features of the date chart from *When Egypt Ruled the East*, by George Steindorff and Keith Seele. To the Search Publishing Company of London we express thanks for their willingness to have us use an illustration of which all their file copies have been destroyed by enemy action.

We thank Commander Carlo Pfeister of Genoa for the Cirene picture; Thomas

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MADELEINE S. AND J. LANE MILLER

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ENCYCLOPEDIA
OF
BIBLE LIFE

AGRICULTURE

He that tilleth his land shall have plenty of bread.

—Prov. 12:11

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INTRODUCTION

CULTIVATION A BOND AMONG BIBLE PEOPLES

Cultivation of the soil is an endless cord that has bound together happy and universal experiences of people in ancient Bible lands for more than seventy centuries. The warm gold of Sumerian harvest fields, mature in the era of Abraham and for thousands of years before that; the flash of ruby sunsets reflected in Nile canals veining lush fields with throbbing life; the colorful emerald of early spring in the fields of Canaan—these make an ornament worthy of the rulers of men.

The Bible is a book of people who spent most of their time in the open, aware of the revolving seasons and questioning the relation of the Creator to their coveted crops. The wishful yearning of early Israel

for a homeland "flowing with milk and honey"; Jesus' own interest in farm ways, reflected in his parable of one landsman who was so intent on his work, as farmers always are, that he declined a wedding invitation (Luke 14:12-24); and the Apocalyptic allusion to gardens where trees produce "twelve manner of fruits"—all tie together in a unified background of folks who were basically rural. The greatest truths they left us are couched in terms of the natural world. Prophet and peasant alike admitted that God crowned the year with His goodness when He granted new harvests for hungry people. They knew all about what an American Secretary of Agriculture called "The Great Green Battle" of food strategy.

Hebrews had several tutors in the methods of cultivation: the ancient Sumer-Accad group (Gen. 10:10), who became

the Babylonians, the Egyptians, and the Canaanites, of whom we shall speak presently.

In fact, all through this book we shall be seeing that the cradle of the most ancient civilization had two rockers, one resting in the fertile Nile Valley, the other in the wealth-yielding fields of western Asia—Mesopotamia, Syria, and Anatolia. Crete was a prolific propagating garden for influential Minoan culture.

Ideas were constantly flowing back and forth between these regions. In the University Museum at Philadelphia there is a prehistoric plowshare excavated near Sumerian Ur—misnamed “Ur of the Chaldees” by the forgotten author of Gen. 11:28. It is of stone and is the sort still used in Iraq, attached to wooden handles. Cultivation methods in Bible lands continue much the same as in ancient times, except on government farms or in Zionist colonies and modern Arab projects.

THE EARLIEST LANDSMEN

Agriculture marks the beginning of civilization. In the long stretches of time before man began to write, he was feeding his family from fish caught in streams near his cave-home or mud-reed hut, or from booty hunted in the forests. One day he noticed grasses growing along his river. He found he could tame them into grain for coarse bread-meal or combine them with fresh-killed meat for a tasty mess of pottage. When this happened, the first farmer was on his way to market. Wheat and barley, the two chief crops of the Near East through the centuries, evolved. Nobody remembers where the first seeds came from. “God gave the increase.”

Nomads found they could carry seed with them and plant as they moved from one grazing ground to the next and settled down for a time. Nelson Glueck, in *The Other Side of the Jordan*, states that in eastern Palestine early peoples alternated farming and grazing. We have seen the sedentary and the seminomadic going on side by side in Transjordan highlands beyond Amman today, where, below the walled hilltop village used by a clan in winter, lie vast harvest fields into which

families move for summer work. On the edge of these are arid grazing lands for camels and sheep.

C. C. McCown, in *The Ladder of Progress in Palestine*, states his belief that Homo sapiens was engaging in agriculture 8,000 or 10,000 years ago in Palestine. Farming preceded even pottery-making. Some authorities believe that agriculture existed before the breeding of domestic animals.

Strictly speaking, nomads are people who have not known what it is to build houses or grow wheat. We think of the first patriarchs of Israel as nomadic husbandmen. Yet Abraham himself came from the highly civilized city of Ur and must have had knowledge of methods yielding wealth to priest and people in the eighth century before Christ. Woolley indicates that it was customary for Sumerian rulers to take the title, *patesi*, or “tenant farmers of a land-god.” Their cultivators used flint sickles.

ELEMENTS IN AGRICULTURE

WATER

In few other lands are crops so dependent upon rainfall as in the Near East. And not only crops, but human life. When Joshua the strategist noted, “The Jordan overfloweth all its banks all the time of harvest” (Josh. 3:15), he saw rations in sight for his troops. Military contests in North Africa and Palestine have depended all through the centuries upon ability to get water. Allenby, Rommel, Wavell, and Montgomery battled with thirst. Major Peter Rainier, in charge of the water supply of the British Eighth Army in its North African campaign, has written a book describing the campaign in terms of pipes, reservoirs, and water carts.

All summer long the spent fields of Palestine and Syria lie parched and resting. Looking at their rock-mud clods, we wonder if they will ever again open up to produce. But late in September and early October come the “former” rains. Plowing becomes possible. Winter continues wet, with occasional snowfall as far south as Bethlehem’s gardens and grazing fields. Of course, even summer sees snow on the lofty

slopes of Mount Hermon and on the 6,000-foot heights of the majestic Lebanons.

Motoring from Beirut over the Lebanon Range toward the Beka'a Plain and Baalbek, we have seen a caterpillar-like snow tunnel for the railroad, indicative of the heavy fall in winter months.

Job referred to "treasuries of the snow" (Job 38:22); and Samuel, to one who "went down . . . and slew a lion in the midst of a pit in the time of snow" (II Sam. 23:20).

In March and April come the "latter" or abundant showers, filling empty cisterns and soaking cracked fields to ensure harvests from seed sown in December. From May through August there is no rain. We have traveled from one end of the Holy Land to the other in summer, unburdened by raincoats and umbrella—save our huge brown cotton sunshade, such as sheiks carry. "The sun shall not smite thee by day" has real meaning here during summer drought.

Porous limestone under Palestine topsoil allows heavy rains to filter through, so that earth is right for final stages of growth. From underground watercourses moisture trickles into wadies, or old stream beds, which in summer are torrid highways of burning rock, lined with deep-rose oleanders.

Moses' knowledge of the watery secrets of limestone is reflected in the Rephidim "rock-smiting" story (Ex. 17:1-7). He knew that if he gave the rock a vigorous blow, the front surface would fall away and water would pour from the limestone "filter." He struck. And the thirsty people drank to their refreshing. Major Jarvis, one-time Governor of Sinai, confirms the rock-smiting technique.

East of Jordan, in the high tablelands, rainfall is so plentiful that the larger streams—Arnon, 'Arab, Jabbok, Yabis, Nimrin—do not completely dry up in summer but conserve a supply to refresh sheep resting along their course. The "sound of abundance of rain" was as sweet to farmers and shepherds as to prophets who were glad for a cloud as large as a man's hand, in the west, over the Mediterranean at Carmel. The rain contest between Elijah and the priests of Baal had

an agricultural as well as a theological significance (I Kings 18:41).

Palestine Arab farmers today so honor November rains that they shout praises of the rain-bringing St. George of Lydda, whose feast they celebrate while the thundering "mare of St. George" comes through the sky. Vigorous December rains elicit the brave ejaculation, "Let rain and more rain come. Our house is built of iron. We can take it. Our crops will thrive." Even in lovely April the Arab farmer covets a bit more rain.

In dry seasons heavy dew save the crops by clinging to the valleys until the rising sun sucks them up with an ethereal beauty, as we have seen at sunrise on the Mount of Olives, when the veil of cool dew was lifted from olive orchards by the power of sun up-mounting from the Jordan.

SYSTEMS OF IRRIGATION

The high degree of material culture developed at very early dates in both Mesopotamia and Egypt was made possible by elaborate systems of irrigating productive land.

Which of these ancient rivals first devised irrigation? Shall we give credit to the Sumerians on the lower Babylonian alluvial plains who devised so many "firsts" in civilization? Or shall we say that dwellers along the Nile who had no rainfall first learned the secret of applying their abundant river water to low-lying Delta fields, spreading its use over many months? Both parts of the wishbone of antiquity—Mesopotamia and Egypt—spread their knowledge of irrigation into tiny and unresponsive Palestine, which never applied this skill on a large scale and which never enjoyed material wealth. From Palestine, Syria, and Phoenicia the irrigation pattern spread westward into other Mediterranean lands.

The source of water from irrigation is highland snows which feed rivers. Springs add their contribution from ridges of limestone and chalk. Man applies his engineering ingenuity to the control and distribution of God's supply, and velvety fields of watery green reflect prosperous dawns.

No discovery of man has proved more valuable to him than that of making the

good earth yield more richly by digging ditches and turning wet nourishment into his acreage. In both Mesopotamia and Egypt this occurred prior to 3000 B.C., suggests William F. Albright, in *From the Stone Age to Christianity*. He says that predynastic Egyptians and Sumerians of the lower Euphrates were digging canals and constructing dams in the Mesolithic and Neolithic ages (c. 8000-4000 B.C.). By the great Chalcolithic Age (c. 4000-3000 B.C.) they were large-scale producers of cereals, figs, dates, olives, flax, and many garden vegetables, such as lettuce, garlic, onions, beans, peas, and marrows. Babylonia found her flood rhythm less dependable than that of Egypt. Hence, says Albright, many disputes about water rights, repair of reservoirs, building of extra sub-canals, as recorded on clay business tablets, led to the development of what he calls "the world's oldest city-states." People were compelled to league together to work out their community-utilities problems.

Sumerians living between the Tigris and Euphrates rivers 5,000 or more years ago learned that the Euphrates banks lent themselves to more effective ditches and dykes for irrigation than the Tigris. This discovery influenced history. Here in Sumer, wealthy agricultural rulers, or patesi, supervised repairs and constructed canals on which life depended. Lower Mesopotamia benefited by the heavy snows far up in the mountains of Armenia which melted and supplemented the runoff of rain in warmer months. Another quota of water for this area was supplied by the Tigris with contributions from the highlands of western Persia (Iran). The spring floods essential to farming sometimes became catastrophic. Noah's flood could and probably did occur in Sumer, the lowest portion of Mesopotamia. Therefore, as Gordon East points out in *The Geography behind History*, reaches of the Euphrates and Tigris which did not prove commercial assets because of rocky bars across them were natural reservoirs utilized in early times for crops which were conveyed across deserts on the backs of countless asses.

Hebrew captives were familiar with networks of Babylonian canals. If you travel by air over ancient Mesopotamia today,

you will see abandoned canals, as well as ones in good running order. When these ditches fell into disrepair through war or lethargy, civilizations crumbled, even as the Hebrew prophet Jeremiah said they would: "A drought is upon her [Babylon's] waters, and they shall be dried up" (Jer. 50:38).

Kings who dug canals were mentioned on important tablets as benefactors. In the British Museum there are several clay tablets inscribed with cuneiform lists of canals and principal streams, catalogued by systematic Babylonian scribes. One boundary-stone records a piece of corn land in the district of Shalulni on the shores of the Narsharri or Royal Babylonian Canal, by King Meli-shipak c. 1200 B.C. Another tablet in the same museum indicates how a piece of farm land had been surveyed by the governor, a royal scribe, and another official before it was granted to Khasardu by this same King Meli-shipak. Canals were the concern of king and conqueror. One of the errands of Alexander the Great on his last trip to Babylon was to inspect canals. Having done so, one fatal day in 323 B.C. he went to a banquet and drank his way into the debauch which resulted in his death.

The Egyptian canals of ancient times and the present explain a large part of the prosperity, culture, and joy of people living in this almost rainless land of sunshine and brilliant starlight. Their *shadúfs* and *sakkiehs* which lifted the Nile water to thirsty fields; their dependence upon annual inundations of the Nile on definite dates, if not in predictable amounts of water; the rise to power of local chieftains who controlled the tiny ditches and wider canals of the irrigation system, telling the farmers when it was time to clean out the veins and arteries of the vast throbbing system of life—all these watery details of everyday activity in Egypt were as familiar to Moses and the Hebrew sojourners as they had been to Joseph. Even Abraham knew the fluid wealth of Egyptian canal systems and Nile inundations.

Breasted calls attention to the fact that the first three seasons ever identified were the Egyptian four-month periods known as the "inundation," the "coming forth," and the "harvest." We understand why

the irrigation canals were taken under the unified custody of the reigning Pharaoh, whose wealth depended upon his farmers' ability to produce rich crops. As much as 4,000 years ago, Egyptian kings had forts guarding the barrier at the second cataract of the Nile. Observers who watched the rivers rise sent word to lower Egypt that the usual taxes could be estimated on the yield of that year's crops.

Sampe, in *The Geography of the Mediterranean Region* states her belief that irrigation became "historic" about 5000 B.C., at which time only the left bank of the Nile was artificially watered for agriculture. Not until c.1380 B.C. was the right bank claimed for farms and gardens.

Egypt devised a clever irrigation machine at the dawn of history which we see in use along the Nile today. This *shaduf* lifts water from the river to the level of the tilled field. It consists of a long pole attached to two stakes driven into the shore. To one end of the pole a heavy weight of mud or stone is fastened. To the other, a leather bucket. One farmer drags the pole down to dip up the alluvial Nile water. A second laborer manipulates the opposite end, poised in balance, so that the bucket empties its contents into the little canal waiting to carry it to thirsty fields.

Another type of Egyptian waterwheel which survives from very ancient times is the *sakkieh*, a large iron wheel revolving on an upright post and turned by means of a smaller wheel harnessed to a dray animal which walks round and round in his blindfolded monotony (illus. 3).

The most primitive type of irrigation ever used in Egypt is suggested in Deut. 11:10, which tells of farmers sowing their seed and watering it with their feet: some device, controlled by a pedal, opened sluices from the Nile, or farmers simply kicked with their feet the little mud frames separating the fields from the subcanals of the river. The author of this ancient book was keen to point out the superiority of the land to which Israel was faring—a country where, throughout the year, hills and valleys drank the "water of the rain of heaven."

Two types of irrigation were practiced in Egypt during Bible times, as well as today. The "basin" system, which provides for

only one crop per year, calls for areas embanked with low walls of mud and fed by canals from the river. The partitions of such basins seem to be in the mind of the author of Deut. 11. The second type is the "perennial" technique, which constructs for the benefit of at least two crops per year, a much more costly and elaborate system of canals, subcanals, smaller branches, and tiny rivulets of water.

Our illustration 13 shows an Egyptian canal watering a present-day Egyptian cotton field, with date palms in the background and the three Great Pyramids of Gizeh fifteen miles away. The hard footpaths along the irrigating canal are eloquent of many centuries of farm-laborers' comings and goings on dawn-to-dusk tasks. Note the sluice gates controlling flow.

A Nilometer, or gauge of the rising Nile waters, has been in use since the dawn of Egyptian science. It is a pillar with a scale divided into cubits (20.6 in.). The present official Nilometer is set in a square well at the south end of the island of Roda connected by a bridge with old Cairo. When the Nile waters have risen $15\frac{3}{4}$ cubits, and the temporary dam at the Khalig Canal is cut, gala ceremonies similar to ones in Venice at carnival time bring throngs of people by boats to see "the bride of the Nile," a cone-shaped earthen pillar, topple from the dam into the rising stream.

The Promised Land of Israel never did bloom and blossom as the rose in ancient times, because irrigation was never practiced on a large scale. That "miracle" was left for energetic Jews from many oppressed nations to attempt in the twentieth century A.D.

Yet a few patches of irrigated farm land were tilled in Palestine and Transjordan in Bible times. There are irrigation ditches today in the boggy delta at the site of Bethsaida, home of Philip and Andrew, near the inflow of the Jordan to the Sea of Galilee. The land here is naturally very fertile. Along the Jordan Valley, too, Arabs occasionally have in operation today partly cleared jungles along the east bank of the Jordan, watered by ditches controlled by primitive sluice gates. We have seen irrigation practiced today by diligent Jewish farmers on the

Plain of Esdraelon (illus. 223) and on acres of orchards five miles south of the Sea of Galilee, near the point where a dam and modern road mark the flowing-in of the southern end of the Sea of Galilee to the Jordan.

Glueck points out that extensive irrigation, using a long aqueduct of stone blocks with hewn channels, was used at a Nabataean site called Khirbet Ayun Ghuzlan, near the Temple of Khirbet Tannur on the little Wadi Hesa emptying into the Dead Sea. This aqueduct, portions of which have been found near the springs, reminds us of the one constructed by Pontius Pilate in the era of Christ at Solomon's Pools. Irrigation and aqueducts made life tolerable for the large energetic population of Transjordan before the Roman era. Glueck, in *The Biblical Archaeologist*, December, 1943, says: "In all periods of settlement in Transjordan, the civilizations there may be characterized as belonging to an irrigation culture. Their livelihood depended upon the uninterrupted flow of life-giving waters. It was not till Roman times, apparently, that the inhabitants of the Jordan Valley learned how to tap and utilize underground supplies of water."

A significant piece of early irrigation engineering exists at 'Ain Gedeirat ('Ain el-Qudeirat), accepted by Albright and others as the location of Kadesh-barnea where Israel maintained headquarters during the forty years' wandering in Sinai. This place lies between El Arish, on the present border between Palestine and Egypt, and 'Aqabah at the head of the Red Sea. Major C. S. Jarvis, who is conversant with the topography and history of the Sinai Peninsula because of long residence there, tells of two abundant springs flowing summer and winter at the old Kadesh-barnea site, now dammed and channeled to cultivate territory nearby. He speculates on the origin of ancient masonry in a dam and reservoir here at 'Ain Gedeirat. Could this irrigation system have begun with Moses and his host? Certainly they were conversant with irrigation systems which long before their time had been used in both Egypt and Mesopotamia. Or is the old equipment merely Nabataean? Or was it made in the

latter days of the Roman Empire by foreign legionaries recruited from regions less skilled in good masonry construction than Romans? At any rate, it has been reconditioned and put to work again by the Egyptian government.

Phoenicians, whose territory lay along the Sea west of Palestine, had ample water rushing from the Lebanons to the Mediterranean. But these slopes became easily denuded and, since ancient times, have been terraced and irrigated so that summer and winter cultivation for large populations along the coast has been possible. We have seen grain and fruit terraces up in the Lebanons at heights of 4,000 ft. Ancient Phoenicians used the law of inverted siphon and conducted their water through earthen pipes set in blocks of stone. They brought ice-cold water from the Lebanon down to their port at Sidon. To Phoenicians, Greeks were probably indebted for the concept of irrigation.

Greeks found their mountainous peninsula rich in refreshing springs dear to the nature-god Pan and goddesses of fountains, such as Danae and the Nereids. But, for the practical purposes of farming, peasants dug irrigating ditches and canals at a very early period. The vineyards familiar to Paul near Corinth would never have become famous but for the utilization of abundant springs on this isthmus at the flowery fields of the Cephisos Valley for faithful irrigation.

One of the great contributions of America to the Greece of the new Near East is the education of men and women to meet the complicated problems of farming in this rugged and courageous country. This program includes draining swamps, irrigating arid soil, cleaning cisterns, and spraying brackish water for malaria prevention. American teachers and capital are playing a large role in this enterprise.

SUN

In all the natural elements ancient people saw gods. But none outranked the life-giving sun, which became a chief god not only in Egypt and Syria but in almost every nook of the ancient Mediter-

anean world. The author of Ecclesiastes said, "A pleasant thing it is to see the sun" (Eccles. 11:7). To the priest of the Nile Valley it was more than pleasant; it was a manifestation of the god Ra, the sum-total of benefits.

When the monotheistic Egyptian king, Akhenaton, built his capital at Amarna and diverted worship from Amun to Aton, he had his artists depict the sun deity with a burst of rays, each of which terminated in a little hand extended to bring gifts.

Arab farmers near Bethlehem, says Grace M. Crowfoot, have proverbs in praise of bright April sunshine, when old parents may safely sit outdoors, when young girls bathe in dew of growing cornfields to increase their matrimonial assets, and when wild flowers and festivals rival one another.

WINDS

From noon to sunset in the busy harvest season west winds, from the Mediterranean, make heavy labor tolerable. Their blowing greatly assists with winnowing (illus. 9). Jesus referred to the rain-bringing west wind (Luke 12:54).

East winds have the reverse effect. All through Scripture they denote devastation, as when the Psalmist cried, "with the east wind thou breakest the ships of Tarshish" (Ps. 48:7). The heat of the sirocco, a desert wind, blasts grain and invites famine. Two types of sirocco are indicated by George Adam Smith: one makes the sky ominous with blinding sand-clouds and a high wind; the other comes with a silent, hot burning. One kindly act of the east wind is reported in Ex. 14:21: "the Lord caused the sea to go back by a strong east wind all that night, and made the sea dry land, and the waters were divided." This timely courtesy of a usually malevolent desert east wind holds true, whether we regard Israel's route from Egypt as lying by way of southern Sinai Peninsula or accept Major Jarvis' appealing belief that they came by way of the coastal Bardawil Lake ("Sea of Reeds") at the border of Egypt and Palestine, going thence east to Kadesh-barnea. The latter place he suggests as the present

'Ain el-Qudeirat, because here is a reservoir of such great antiquity that it may have been prepared by the Israelites for one of their temporary sedentary occupations. Jarvis sees in the cumulus clouds of the east wind a guiding pillar by day. To him, the Mount of the Law is Mount Hellal and not the southern Sinai, Serbal.

The writer of Proverbs detected in the north wind a force "that bringeth forth rain" (Prov. 25:23).

The south wind, arriving from the Arabian Desert was recognized by Jesus as a bringer of heat. Christ was a man of the open and knew weather-wisdom: "When ye see a south wind blowing, ye say, There will be a scorching heat" (Luke 12:55).

People in Bible lands were so wind-conscious that, when they felt vigorous manifestations at Pentecost, they described them as a "rushing mighty wind," filling the house where the disciples were sitting (Acts 2:2).

Winds, for Palestinians today, are tied up with God's cosmic affairs. In times of world war, they say: "The wind is not right. How can it be? Earth's matters are so disturbed that even heaven cannot act normally. Bad winds are blowing in on us."

The Greeks also were conscious of destinies determined by winds. They expressed this belief by building a notable Tower of the Winds which stands today near the marketplace known to Paul.

Roman artists paid homage to the trade winds of Sicily in the three-legged figure of the messenger we have seen in the floor mosaics of the Chamber of Commerce at Ostia, second-century port of Rome.

OWNERSHIP OF LANDS

Kings, such as Solomon, Tuthmosis III, and Darius, and groups of priests and priestesses at important temples, controlled most of the lands. Yet groups of free farmers had sections allotted to them with rights they could bequeath to their children. These landmen liked to work in groups, tilling out from the villages where they lived, for protection and neighborliness, each taking his turn on guard in the cucumber lodge or in the leafy-roofed

watchtower in harvest fields. This custom of "suburban" fields adjacent to villages still prevails, as we see at Ramallah north of Jerusalem.

Ancient land tenure finds parallels today in the agricultural colonies of Palestine. There is one capitalistic type, where an absentee Arab or Jewish owner exploits labor for private gain. And there are co-operative farms of Zionists, bought with money from the Jewish National Fund and leased for forty-nine years, on a basis of what each man can actually cultivate. These carry privileges of inheritance for heirs. There are also the collective farms, such as 'Ein Harod, where a group shares all the labor processes, the marketing, and the profits, with opportunities for night education.

As late as the first century A.D., large-scale farms owned by chief officials were taken for granted. Paul in Malta (see p. 261) was entertained by a rich landsman, Publius, probably in a breezy island villa—hospitality which the Apostle repaid by assisting in the cure of his host's father, ill with the ever-current Mediterranean fever and dysentery (Acts 28:8).

By modern machinery, power from the Rutenberg hydroelectric plant at the Yarmuk, draining of marshes, agricultural education, and distribution by the Palestine government of seeds and implements, this little land is producing more today than in prosperous Bible times. In 1942, because of cessation of imports, it yielded three times its former yearly amount.

TILLERS IN BIBLE TIMES

BABYLONIAN FARMERS (SUMER-ACCAD)

Sumerians arrived from mysterious highlands between India and the Plain of Shinar (Gen. 10:10) before 4000 B.C. Or, according to Carleton, they came from the area between the Black and Caspian seas.

In *When Egypt Ruled the East*, Steindorff and Scele suggest that before history dawned, Semitic tribesmen from the east had brought the boon of agriculture across the Red Sea by way of Sinai Peninsula to

Egypt. Thus seed from what Breasted cleverly christened the "Fertile Crescent"—that arch of green life running from Mesopotamia north around eastern Syria to Phoenicia and Canaan—fell into the perfect propagating beds of the Nile Valley and Delta.

Much of the fabulous wealth and culture of Babylonia sprang from fields in the Plain of Shinar, "the land between the rivers" inundated annually by the Tigris and Euphrates. In fact, when the Euphrates changed its course, Ur ceased to exist, says Sir Leonard Woolley in his *Abraham*. Two crops of grain per year were normal in an alluvial plain larger than cultivated Egypt—yet, measuring not more than 8,000 square miles.

We gain some idea of the extent of Mesopotamian farming through numberless clay tablets recovered from her ancient fields, recording crops raised, canals repaired, fields bought and sold, and date-palm groves bartered (illus. 78, 79). Of further help are the characteristic boundary-stones or limestone steles set up not only to mark ownership but also to portray exploits of current rulers. Some of these boundary-stones from the period 1200-850 B.C. are in the British Museum, tabulating in Babylonian and Assyrian cuneiform writing the renewing of land rights and permission to bequeath fields. The legal phrases are interspersed with religious symbols—snakes, birds, discs, stars, crescents portraying the influential celestial bodies—and sometimes with pictures of god-houses which were set in the fields to "control" production.

One of the most famous boundary-stones dates from the reign of Nebuchadnezzar. It rewards with certain privileges one land warden, Ritti-Marduk of Bît-Kar-siabku, following the victory over Elam. It boldly warns the neighboring rival king not to tax Ritti-Marduk's stallions, oxen, sheep, or date plantations; not to cut roads through his farms; and not to recruit his farm hands for army service. Quite a human document. Usually, natural boundary-lines—canals, tablelands, and wells—were used to demarcate farms too extensive to be fenced.

An ingenious Babylonian device for cultivating fields is indicated by Breasted in

a picture based on a seal published by Clay. It shows a pair of oxen drawing a pointed seeder whose handles are held by the driver as it makes shallow trenches. A second farmer pours the seed into a funnel attached to the frame of the plow-seeder from which it drops into the opened furrows. A forerunner, this, of modern "combination" farm machines. Babylonian farmers were full of initiative. They gave kings their only source of real wealth. Everything but farm produce had to be imported. Hence the vast Babylonian business empire.

An indication of the high regard for field culture among Babylonians is stressed by Patrick Carleton in *Buried Empires*. He relates how Sargon I, an outstanding figure in early Babylonian history, is said to have been born of a mother so lowly that she hid her infant in an ark of bulrushes, as a British Museum tablet indicates. He was raised by one 'Aki the Irrigator, "who taught him the art of gardening." Sargon, therefore, joins the Moses-in-the-bulrushes and the Romulus-Remus-Tiber stories. He ruled c.2568 or 2360 B.C. and was founder of the influential Agade from which the name "Akkad" or "Accad" was given to north Babylonian plains.

The ancient deluge sagas which have come out of Mesopotamia always engaged the interest of primitive farmers because they saw not only the dawn of a religious epic but an explanation of their prized lands' emergence from the waters, with agriculture just ahead as a challenge. The stoneless, windy, alluvial flats favored date-palm production in an exceptional fashion. So sacredly did Mesopotamian cultivators regard their valley-plain that they built their lightweight reed homes on platforms of mud-brush, so that they would not impair the rich, level marsh land.

The irrigation culture of Babylonia figures picturesquely in the Bible narratives of Judah's captivity. Psalm 137 certainly reflects scenes of watery Mesopotamia:

By the rivers of Babylon,
There we sat down, yea, we wept,
When we remembered Zion.
Upon the willows in the midst thereof
We hanged up our harps.

—(Ps. 137:1, 2)

But with such opportunities for gainful farming at hand, the diligent Hebrew captives did more than sit by the canals and weep. They probably joined in the planting activities, as the prophet Jeremiah advised them (29:28). As a result, they carried back to Palestine upon their return not only secrets of successful agriculture but financial gain. From farming, from work at the famous Babylonian looms and vats for fabrics in which Hebrews later became expert, and from the metal crafts of smiths who were taken captive (Jer. 29:2) came the golden capital carried back to the homeland from the "land beyond the River." Not only did the clement Cyrus (illus. of his tomb, 213) allow them to export the gold and silver Temple ornaments which Nebuchadnezzar had stolen (Ezra 1:7) but sent with the returning people of Judah presents of gold, silver, and "precious things." The Jews never forgot the generous treatment by Cyrus. They wrote down his largesse in the undying pages of their Scriptures.

A concrete evidence of their agricultural, craft, and business experiences during the captivity in Babylon is the explanation of Hebrews' ability to pour into the restoration of the Temple at Jerusalem "three-score and one thousand darics of pure gold, and five thousand pounds of silver, and one hundred priests' garments" (Ezra 2:69).

The people of Israel who had been carried off in 722 B.C. by the Assyrian king were taken to the vicinity of the river Habor (Gozan) and were replaced at Samaria by "men from Babylon . . . and from Hamath" (II Kings 17). This area of exile was near the northeast top of the arch of the Fertile Crescent and must have involved agricultural pursuits for the captive Samaritans, even as the deportations of Hitler's victim-populations resulted in enforced farm and factory labor.

CANAANITE AGRICULTURISTS

Farming was a chief interest of Canaanites and exercised a profound influence upon their religion, which in turn left imprints upon the developing Hebrew faith.

They were in control of the best lands

when Israel arrived on her mission of conquest. Vestiges of Canaanite farming between 1500 and 1300 B.C. have been found at Kirjath-sepher (Tell Beit Mirsim), mentioned in the Bible as conquered by Othniel. Caleb, to whom Joshua had given a parcel of land, including Hebron, in southern Judaea from which the valiant Israelite drove its "original settlers" (Josh. 15:13), in turn offered Kithiath-sepher and his daughter's hand to anyone who would take the town. Othniel did the deed, won an extra field, Aksah, and "the upper and the lower springs," which the bride persuaded her father Caleb to add to their inheritance in the hot southern farm land. This section, which J. Garrow Duncan (in his *Digging up Biblical History*, Vol. II) says was occupied continuously from 2000 to 600 B.C., has yielded to the spade of the archaeologist iron plowshares and sickles in the fifth of the six levels of occupation of Kirjath-sepher, alongside Philistine pottery helping to date these finds.

EGYPTIAN CULTIVATORS

Egyptian agriculture began perhaps as early as Natufian times about 10,000 years ago (Albright).

It is still "going strong": witness the desperate efforts of Germany in 1942 to break through from Libya and possess the foodstuffs and water supply of the Nile Delta for her North African troops.

The oldest extant pictures of Egyptian farm life come down to us from the walls of the remarkably cheerful Fifth Dynasty Tomb of Thi at Saqqarah, preserved under Arabian Desert sands near the ancient capital of Memphis. These colorful, life-like scenes show every stage of a rich landsman's production program in Egypt of that day. Low reliefs show the village mayor collecting taxes in the form of geese, oxen, and corn carried in by processions of men; farmers are cracking corn and loading the sacks on donkey's backs; men are killing oxen and milking cows as they drive away thirsty calves.

FARM WAYS

Egyptian methods of farming were similar to those followed in Palestine,

which we shall discuss below, except that Egyptians usually sowed before they plowed and allowed animal hoofs or cross-plowing to plant the seed. Even in fertile Egypt farming was always hard toil.

Shakespeare, in Act II, Scene 7, of *Anthony and Cleopatra*, indicates the historic method of Egyptian sowing:

... the higher Nilus swells,
The more it promises; as it ebbs, the seedsman
Upon the slime and ooze scatters his grain,
And shortly comes to harvest.

For threshing a wooden sledge, or "mowry," having rollers on its lower surface, was used. Often Egyptians threshed by letting hoofs of animals tramp out the grain-heads.

The Metropolitan Museum of Art owns an ingenious Egyptian hoe of the Twenty-first or -second Dynasty, found at Deir el-Bahri in Thebes. The handle of this early hoe is arranged so that an alternate tool, a pick, can be inserted when the hoe is not needed. Similar to household tool combinations today! This museum also shows an ancient harvesting knife with a bronze end, a wooden rake, and wooden scooplike winnowing fans.

CROPS

Egyptian crops in Bible times were much the same as in Palestine, described below. For corn, vines, and olives have been called the Mediterranean trio of farm produce.

Her most coveted product was corn, a generic word like our "grain," covering several kinds of cereal—wheat, barley, millet, lentils, pulse, even beans. Every group of hungry people around the Mediterranean shores who could build or commandeer a caravan or ship sent it to the Delta or the great corn market at Alexandria to buy grain.

An interesting study could be made of the wisdom and the justice of corn laws worked out by the Hebrew Joseph while he served as secretary of agriculture for an Egyptian pharaoh. Grain figured in Joseph's dreams even before he went to the south as a captive, when his sheaf accepted homage from those of his brothers (Gen. 37:7). These fat ears of grain appeared in

the dream he interpreted for Pharaoh (Gen. 41:5-7). Eleanor A. King, in her *Bible Plants for American Gardens*, raises several interesting questions about Joseph's cereal culture. Did Joseph, in his fourteen-year plan for production, teach the Egyptians anything they did not already practice? Did Joseph know anything of engineering—as his canals that were new 3,000 years before the construction of the Assuan Dam might indicate? What about the ethics of his enslavement of the hungry Egyptians who became feudal land tenants?

Just before and during the first Christian century Rome was constantly keeping her population bribed with bread and circuses. The basis of that bread was grain, stored and ground in the Roman "pantry," the port of Ostia (illus. 83), but imported from Egypt. Paul sailed more than once in an Alexandrian corn ship (see *Islands of the Bible*, p. 261).

Flax bloomed in Egypt in the time of Moses. The daintily striped pink flowers of this *savatum* were also making fields of the Canaanites gay when the Jacob tribes entered the land to settle. Egyptian flax yielded the makings of the fine linen used abundantly at home and exported far and wide. Bleached white as snow, it made kilts for priest and king. It furnished winding bands for mummies. It was as staple as Egyptian cotton is today—which product, by the way, did not grow in ancient Egypt or Palestine apparently. Used in palace hangings, it was imported from Persia or India. Probably Hebrew captives in the Moses era toiled in the flax fields, for they not only labored "in mortar and in brick" for the Pharaohs, but "in all manner of service in the field . . . with rigor" (Ex. 1:14). Their lot was in bitter contrast to that of the first sons of Jacob who went down into Egypt in famine time with money in their sacks to buy desired grains.

Dates, dangling from the feathery tops of the shaggy-barked oasis trees of Egypt (illus. 15) and feasted upon by natives through the centuries, exist in tints of gold, mahogany, and yellow. They have always been staple. (See *Flowers and Trees*, p. 210) So were melons and many vegetables at an early date.

One explanation of reliable crops in Egypt was the dependable calendar for

planting which was dictated by Nile floods. V. Gordon Childe, in his *New Light on the Most Ancient East*, describes the Nile inundations as more regular than those of Mesopotamia. He points out that the high flood times at the apex of the Delta and at Heliopolis, on the outskirts of Cairo, coincided with the rising of the star Sirius. On the basis of this date, not only did Delta farmers proceed, sending out the signal to other cultivators, but the ancient Egyptian calendar from which our own came was worked out. The Sirius-inundation calendar, says Childe, had twelve months of thirty days, with five "intercalary days added." A full thousand years or more before Menes, founder of the First Egyptian Dynasty, dates were being listed. Carrying back their ancient field tillage still further, Egyptians gave Osiris, god of the underworld, credit for agriculture.

Early Egyptians discovered that they could live all year on the products of three or four months' labor. Does this help explain prolific art creations? If so, why is not modern Egypt as creative as the ancient land?

When forceful, loyal rulers such as Tuthmosis III were on the Egyptian throne, fields produced prodigiously. The pharaoh himself made the rounds of farmers, talked over their problems, gave them fresh seeds, interested himself in their welfare even as King Fuad did in the twentieth century. The small fertile area of Egypt today is owned by a very few wealthy pashas. The land needs a middle class. Yet, as Charles Breasted points out in *A Pioneer to the Past*, some head men of tiny villages in the Delta earn as much as \$50,000 per year from cotton and sugar. He envisions a new Egypt with feudal barons like those who 4,000 years ago erected their tombs at Beni Hasan.

GREEK AND ROMAN AGRARIANS

Greeks were hampered in agricultural production in Bible times, as they are today, by the poor quality of their stony soil. The rugged mountain homeland of this freedom-loving people was ideal for olive culture and for honey from the purple range of Hymettus. Greece was the land of Pan, who loved grotto-fountains, gnarled

trees, goat-dotted grazing slopes. It was less hospitable to the diligent gods of the fields we have met in Egypt and Mesopotamia. Making superior pottery filled with her famous olive oil, ancient Greece sent cargoes northeast into the Euxine, where the grain-laden shores of this Inhospitable Sea exchanged golden harvests for coveted Attic wares. The Euxine was the bread-basket of the Piraeus. So, too, were the Greek colonies in southern Italy, Paestum especially, where temples to Ceres, goddess of grain, and Neptune, god of the sea lanes, were notable monuments of agriculture and commerce. In 1943 the fields near these same temples were used by the Red Cross for men wounded in the Salerno landing.

Greece has always produced luscious grapes and currants. But it takes more than these to feed a nation. One step in the right direction, however, has been taken in our day by the American Farm School at Thessalonica, a city where Paul and Silas preached in a Jewish synagogue, Christ's sufferings and resurrection (Acts 17:2) and won "devout Greeks a great multitude, and of the chief women not a few." This school, designed to train Greek farmers, received encouragement even from Axis occupation forces.

(For agriculture and Greek worship customs, see *Worship*, p. 449.)

Roman farms were familiar to Paul. Some of the best fringed the Appian Way as he trudged from Puteoli to Rome (illus. 202).

Latin peasants were bringing their produce to Etruscan traders as early as 1000-900 B.C., when Solomon was building Jerusalem on wealth derived from agricultural and mineral wealth of his exploited neighbors.

In Italy of the second century B.C. senators and nobles had seized so much land that farmers were in a precarious way, until Tiberius Gracchus in 133 B.C. introduced a reform providing redistribution of public lands. This agrarian movement recalls what took place in Rumania following World War I when King Ferdinand parceled out rich agricultural sections to peasants who had served under arms. Such agrarian reforms are never permanent. Gracchus was murdered in 132 B.C., and Ferdinand

of Rumania was succeeded by Carol II, whose reign saw one of the most corrupt and plutocratic regimes this thrifty Balkan nation of farm-loving peasants had ever known.

In the first century Italian farms surrounded delightful villas. Poets like Virgil and his friend Horace regaled their bucolic tastes in model farms, from which they floated out the still true philosophy that the yeoman is the happiest and the most-likely-to-be-virtuous individual. Virgil's land poems, the *Eclogues* (42-37 B.C.), in one of which he gives a picture of his own farm, and the *Georgics* (37-30 B.C.), celebrating the happy life of the farmer and the sacredness of rural life in contrast to the feverish political world at Rome, have a tinge of spiritual calm akin to New Testament treatments of the revolving seasons portrayed by Amos of Tekoa. These Roman poems deal with tilling fields, with the farmer's weather signs, with cultivation of the olive and vine, with husbandry of horses, herds, flocks, and bees. Amos wrote of threshing instruments, of plagues of locusts, baskets of summer fruit, grain sifted in sieves, prosperity so great that "plowman would overtake the reaper" and one season of production crowd upon another.

HEBREW PRODUCERS

We are quickly put into the spirit of the Palestine farmer when we read the famous Gezer Calendar, a limestone plaque dating from c.950-918 B.C. It may be, as Albright pointed out in the *Bulletin of the American Schools of Oriental Research*, December, 1943, an exercise written by a Hebrew schoolboy named Abijah, to dictation. The errors that he noticed and corrected in good biblical Hebrew bring us close to this pupil living in the age of Solomon. In singsong meter, similar to our "Thirty days hath September," the seven lines of the Gezer Calendar summarize the agricultural operations normal in the Shephelah or low hill country between the Maritime Plain and the Judaeian highlands. In addition, it definitely refers to the Feast of Weeks at olive harvest time, and the Feast of Tabernacles. The Gezer Calendar, as translated by Albright and others who

have studied it since its discovery by R. A. S. Macalister in 1908, reads:

His (or a man's) two months are (olive) harvest; his two months are grain-planting; his two months are late planting; his month is hoeing up of flax; his month is barley harvest; his month is harvest and festivity; his two months are vine-tending; his month is summer-fruit.

For Palestine farmers today the year begins with November, when nature brings the rains which make possible the opening up of furrows to receive seed for a new year's crops. For a most interesting presentation of the Arab fellahin year see *From Cedar to Hyssop* by Grace Crowfoot and Louise Baldensperger.

Doubtless their participation in farming during their Egyptian sojourn, as we have indicated, made it the easier for the Jacob tribes to settle down in Canaan during the Conquest (from the thirteenth century B.C.). Even during their long trek of a generation up to Kadesh-barnea and into Transjordan and western Palestine they farmed as they journeyed. How else could food have been secured for their cattle, as well as their families? Certainly the miracle of manna and quail did not continue through forty years. Nomadism and settled life alternated, though poor were the farms of southeast Transjordan.

Although Joseph's brethren came admitting to Pharaoh that they were shepherds and had arrived with all their flocks and little ones, as well as their aged father Jacob, the ruler of this rich farm section assigned the shaggy newcomers to "the best of the land, on the land of Rameses" (Gen. 47:11). We believe that the manner in which "Joseph nourished . . . all his father's household" was by helping them to farm on the fat lands to which they had been assigned. Joseph was a clever enough overseer for this.

Meantime, the Hebrews who had not gone down to Egypt were getting on not too badly with their Canaanite farmer- and trader-neighbors. Both had common Semitic ancestors. A mixed farming and herding continued. And as the newer arrivals from Egypt gradually fought their way to possession of lands, they learned

more and more from the earlier inhabitants. The diligent cultivators of the luxuriant Plain of Megiddo had long before produced such a rich crop of grain that when Tuthmosis III (c.1482-1450 B.C.) defeated there the assembled forces of Syria his men reaped a bountiful grain harvest as part of their booty.

All through Jewish history the loot of harvest fields was an anxiety. Saul and David complained of Philistines' raiding their threshing-floors (I Sam. 23:1).

PRECIOUS FERTILE AREAS

Palestine is predominantly mountainous, with rugged highlands and chalky hills curving around the picturesque Maritime Plain. Almost one-half of Judaea, whose high-set capital is sacred to three world-religions—Judaism, Christianity, Islam, is desert, whose chief crop is stones that could cry out much history. Like Greece, whose stern contour contributes men of giant spiritual stature, Palestine's chief glory has been not in her economic yield but in the realm of eternal religious forces. Yet ever since the dawn of history Palestine has been a land of the "sown." Albright believes that people of Jericho Plain in the hot Jordan Valley were farming even before they made their first pottery.

The scarcity of arable land within her borders is the key to the centuries-old struggle to possess the fertile areas. These include her rich little plains.

The *Maritime Plain* runs south between the sparkling Mediterranean and the low, chalky hills and dunes becoming the Shephelah foothills on the east as they mount to the central spiny ridge of mountains running from Hermon in Syria. It extends through hills of Galilee, Samaritan highlands, and Judacan wilderness heights to arid Idumaea, southwest of the Dead Sea. The Maritime Plain is divided east and west by valleys, or wadies, whose slopes smilingly respond to fruit cultivation. North to south, this plain forms a link of prolifically productive sections: one immediately south of Mount Carmel promontory; the beautiful, well-watered Plain of Sharon whose grain fields we have seen dotted with trees for noontime shade to farmers and animals (illus. 130); and the

good grain-producing Philistine Plain at the borders of Egypt. Crops from this area gave supplies to Israel's enemies in the age of Saul.

The *Jordan Plain*, a narrow ribbon of hot, tangled reeds and reluctant farm land, follows the zigzagging Jordan as it drops down from the Sea of Galilee to the Dead Sea almost 100 miles south. This fertile strip, flanked at certain points by high brown hills that look as if they would crumble at a touch, gives promise of more than it yields, except in oases such as Jericho (illus. 122) which is still producing delicious fruits, as it did in the time of Jesus and of Herod and Cleopatra.

The *Plain of Esdraelon*, merging east into the fertile Valley of Jezreel and extending, therefore, southeast from Carmel to the Jordan, has been the most coveted battleground of conquerors for forty centuries and a hotly contested area among rival cultivators. Its productive, level fields are fertilized by the blood of trampling armies. Even their thistles grow to giant size.

This plain is bringing forth riches under the devoted cultivation of new Jewish colonies from many lands, who patiently dig irrigation ditches and bend over the sacred soil to tend their vines and grains (illus. 223).

The *plains of lower Galilee* are gay with groves of figs, olives, dates, pomegranates, near the springs of Cana, for example. George Adam Smith called Galilee the "Garden of the Lord."

The *gradual hills of Samaria*, terraced meticulously in the age of the kings of Israel and in Roman times, have always brought forth coveted supplies of olive oil and fruits, to such a degree that luxurious standards of living here developed. The chief use of the flat hilltop of the Samaritan capital at Sebastieh was farming. We ourselves have seen summer threshing proceeding on a ruined palace floor on the windy height. Terraced highland farms in Lebanon appear in illustration 11.

Within the borders of Samaria lies the *Plain of Dothan*, historic pass from the east to the seacoast route to Egypt, as we see in the story of the kidnaping of Joseph (Gen. 37:17, 25). His presence in that plain is accounted for because he was carry-

ing supplies to his older shepherd-brothers, feeding their flocks near Shechem, when he was seized by the caravan of trading Midianites.

Well-watered and very productive are the *highlands* known today as Transjordan, or *Eastern Palestine*, with such streams as the powerful Yarmuk, whose falls when harnessed afford electric power for modern Palestine; the 'Arabah; the Jabbok, whose weird gorges are a rugged scene in Jacob's saga; and the Arnon, cutting across the earth's deepest-valleyed depression, the Ghor, south of the Jordan. These high well-watered tablelands include the rich wheat country of the Hauran at the north; the medicine-producing moors of Gilead, flanked by orchard-filled valleys; and the famous grazing and wheat lands of the Ammonites, which we have seen still bringing forth "a hundredfold," near Amman, Madeba, and the wastelands of Mount Nebo dropping down to the Jordan.

Nelson Glueck, in *The Other Side of the Jordan*, indicates the resourcefulness of the Nabataeans who irrigated and terraced and tilled even the hot rift of the Wadi 'Arabah, between the Dead Sea and the Gulf of 'Aqabah. They were the only people who ever wrested crops from this weird section at the bottom of Palestine between Moab and Idumaea. He has seen from the air laboriously terraced fields, irrigated by channels connected with a large spring-fed reservoir two thousand years ago. Glueck, ardent expert on Transjordan archaeology, believes these same terraced fields would yield again if given half a chance; they could, in fact, support a population of several millions, as they did in Nabataean times. Nabataeans and Romans who were their successors along this caravan route into Palestine and Transjordan made the country sustain troops holding the pass.

Estimates of the fertile areas of Palestine have always varied. One interpretation of the long term of years occupied by Israel's wanderings from Egypt to Kadesh-barnea is the discrepancy between the two conflicting reports of the spies sent out to view the Promised Land, as recorded in Num. 13. One group, after surveying the country from the Wilderness of Zin to the



2. Putting hand to a primitive plow in Jordan Valley (Luke 9:62).

3. Pumping water with a sakkieh for irrigation, Egypt.





4. Man and woman tilling Palestine soil with mattocks.



5. Lebanese women cutting grain with hand sickles (Joel 3:13).

6. Women flailing grain near Beersheba.



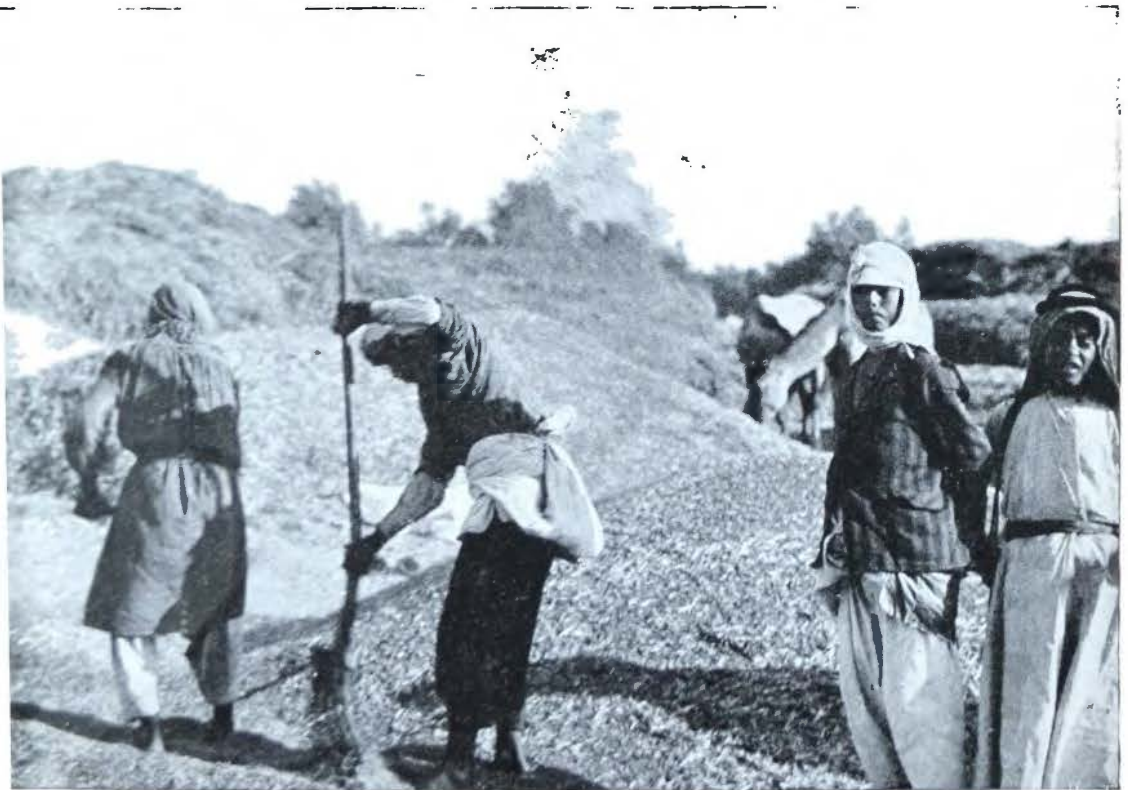
7. A Nazareth threshing-board with teeth of stone or metal, to loosen grain.





8. Close-up of threshing-floor, child-helpers, and yoked oxen, with an old aqueduct to Acre in distance.

9. Winnowing in the prevailing summer wind in Galilee (Ps. 1:4).





12. A summer booth to shelter a farmer guarding his produce in hills of Galilee above the Plain of Esdraelon.

11. Cultivated terraces of Qadisha Valley, Lebanon.



reaches of the Lebanons, reported on the rich agricultural yield of those summer months, when huge clusters of grapes, plentiful pomegranates, and figs suggested that it was a fat land (Num. 13:23). The "minority" report (13:30-33) was so pessimistic that it pictured a lean terrain which ate up the inhabitants instead of feeding them. This conflict in estimated productivity of the Near East continues today. Ardent Zionists insist that the land can support millions of refugee Jews. Others foresee only disaster if more colonists are settled than the country can feed from its own resources. The richest land in Palestine today is the northern half of the east side of the Jordan. Jabesh-gilead was in its midst (I Sam. 31:11-13).

BOUNDARY-STONES

Among ancient Hebrew farmers boundary-stones were sacred as marking the property rights of neighbors. Fields were not fenced as terraced vineyards were; but boundary-stones were respected. "Thou shalt not remove thy neighbor's landmark, which they of old time have set, in thine inheritance which thou shalt inherit in the land that Jehovah thy God giveth thee to possess" was a Deuteronomic law which was carried over into the words of the familiar proverb:

Remove not the ancient landmark,
Which thy fathers have set.

—Prov. 22:28

In contemptuous words the prophet Hosea (5:10) condemns even princes who remove landmarks—a conservatism characteristic of a people striving to establish homogenizing religious laws in a nomadic people.

Women, not only among Babylonian temple groups but also in Hebrew settlements, transacted agricultural land deals. The worthy woman honored in Prov. 31 considered a field, bought it, and planted a vineyard out of her profits. In this thrifty economy she was able to stretch forth her hands to the needy.

SYRIAN CERTAINTIES

The cultural riches of Damascus, oldest city of the world with a continuous history

and the present capital of Syria, have always been based on her productive territory, far better watered than her southern neighbor. Syria's wooded slopes and plains wet by the snows of Hermon and rushing little streams were as promptly appraised by the colonizing Crusaders in the Middle Ages as by the Egyptian Tuthmosis III, who terrorized Bible lands in the fifteenth century B.C.

Behind the material prosperity of the port cities of Syrian Tyre and Sidon (now in Lebanon) lie not only ledgers of foreign trade but a back-stop of rich fruit orchards and gardens. Agriculture, as we have already said, provided the structure of cultural progress, if not of religious growth.

Syrian highways are sometimes lined with shade trees, cooling the paths of pattering flocks. Damascus is itself a green oasis-port on the desert. Mighty-templed Syrian Baalbek heads the fertile Bekaa Valley between the Lebanons and the Anti-Lebanons. High up the slopes of the mountains between Tripoli and The Cedars diligent Syrian farmers cut grain from terraced farms and raise their vegetables (illus. 5).

The fruit orchards of Syria have always been famous (see Flowers, Herbs, Trees, p. 217), and mulberry groves fed the silkworms for her famous looms.

CULTIVATION DESCRIBED BY JESUS

Jesus in his parables and his sayings refers to practically every stage of cultivation. Not for the purpose of phrasing a first-century version of the Gezer Calendar. But because his personal observations of thirty years of farming in the fertile Galilee section near Nazareth offered him a perfect medium for the eternal truths he brought. The gardens, farms, and orchards at Nazareth, familiar to his hearers, yielded him a parable for each stage of growth—growth of produce and of human personality.

PLOWING

Christ knew the strenuous task of the Palestine plowman who looked down into

the resisting clods baked to stony hardness by summer drought, and now softened by the moist rains of October. He had been brought up on the proverb,

The sluggard will not plow by reason of the winter;
Therefore he shall beg in harvest, and have nothing.

—Prov. 20:4

Realizing the concentration necessary to the plowman's task as he guides the wooden handle over the bumpy soil toward the horizon, he says, "No man, having put his hand to the plow, and looking back, is fit for the kingdom of God" (Luke 9:62).

Fortunately, a measure of zest is added to the plowman's heavy labor by the possibility of finding treasure buried in the fields, stored there by forgotten owners who had no banks but the land. The possibility of stumbling on buried coin hoards makes even a tenant farmer sell all that he has to buy the ground. "The kingdom of heaven is like unto a treasure hidden in the field" (Matt. 13:44).

We have seen Palestine farmers come running after us as we rode through their fields on donkey-back, to offer us Roman coins they had turned up in their plowing.

Plows were in earliest times just forked, crooked limbs of trees, driven through shallow soil. Later, iron points were attached to the wood. The resourceful maker of the plow shown in illus. 2 has managed to provide a pair of shafts for his mule by the type of bough he selected.

Animals used in plowing were the heaviest oxen, bullocks, heifers, asses, sometimes camels, but never horses. These were reserved for the rider. Water buffaloes were introduced later than Old Testament times.

Yokes were simple wooden arches passed over the necks of the animals and joined with a bar, to which was attached the center pole reaching back to the plow. There was an art in making yokes that were easy, to lighten burdens. Jesus and Joseph made comfortable ones in the shop at Nazareth. Hence Jesus spoke as an expert when he taught, "Take my yoke upon you, and learn of me; for I am meek and lowly in heart . . . my yoke is easy, and my burden light" (Matt. 11:29).

The yoke at an early date became symbolic of a burdened situation in life. When Solomon's son Rehoboam went to Shechem to be crowned king, "the assembly of Israel came . . . saying, Thy father made our yoke grievous: now therefore make thou the grievous service of thy father, and his heavy yoke . . . lighter, and we will serve thee" (I Kings 12:4).

Ox-goads were long pointed sticks to keep the dray animals moving.

THE PLOWMAN'S TASKS

Sometimes the plowman was not only the keeper of his master's herds but cook-butler also, as indicated by Christ's parable about the duties of the faithful servant: "Who is there of you, having a servant plowing or keeping sheep, that will say unto him, when he is come in from the field, Come straightway and sit down to meat; and will not rather say unto him, Make ready wherewith I may sup, and gird thyself, and serve me, till I have eaten and drunken; and afterward thou shalt eat and drink." This type of farm servant, called "profitable," still exists in Palestine today, as we have learned when riding by donkey to desert Tekoa. While we rested under an olive tree, our donkey-man prepared our lunch. Then he ate his share and handed out the remnants to his helpers, with the patient little donkeys coming in for the last bite.

Frequently groups of plowmen worked fields together. Such a custom is reflected in I Kings 19:19, where we read of Elisha's plowing down in the warm Jordan Valley, with "twelve yoke of oxen before him, and he with the twelfth." He and his neighbors were doing a wholesale job of winter work, upturning the surface of the soil. Possibly Elisha was supervisor. Men could plow not more per day than half an acre of the hard clods. The process often dragged on through much of the rainy winter.

SOWING

Wilderness areas were known as "land that is not sown." As a general custom in Egypt, and frequently in Palestine, sowing precedes plowing. The sower "went forth to sow" with seed in his upturned gar-

ment. Then animals were driven over it, and their hoofs, together with the plow, turned the seed under. The harrow was probably not known in ancient times, and the word so translated must be taken to indicate a system of cross-plowing. Wheat is planted in early winter after the first rains. Barley, which matures more rapidly, is sown later.

Christ told his Parable of the Sower to a company of farmers seated on a hillside overlooking the Sea of Galilee, in a section where the most fertile lands of Palestine for centuries have brought forth fruit. His hearers saw the hard path on which no seed could sprout, and the rocky places "where there was not much earth" and where withering sun scorched feeble efforts at growth. They were all too familiar with choking thorns. They knew the productive patches which would bring forth one hundredfold (Matt. 13:1-8). We have seen these same fields, tended even after twilight by careful Arab farmers along the Lake near Tabgha.

Early morning and late afternoon were favorite times for planting, we learn from the writer of Ecclesiastes: "In the morning sow thy seed, and in the evening withhold not thy hand" (11:6). The phrase from this same chapter, "Cast thy bread upon the waters; for thou shalt find it after many days," has been interpreted by experts on the irrigation cultures of early Mesopotamia to mean that men sowed on still-wet inundation areas, which in the southern heat soon brought forth the coveted bread-cereals.

Paul continued Christ's Parable of the Sower when he said, "He that supplieth seed to the sower and bread for your food, shall supply and multiply your seed for sowing, and increase the fruits of your righteousness" (II Cor. 9:10). Arab farmers near Solomon's Garden at present-day Artas near Bethlehem use a beautiful prayer at sowing time, calling on God to feed man, even as he feeds birds in gloomiest nights and worms under darkest stones. So, too, at harvest they sing praise to God for their tall corn, joint gift of God and their own labors pitted against grazing sheep and camels. They have song-charms against locusts, threshing songs,

and many other lovely litanies of the happy farmer on his soil.

GROWTH

If the seed is good and rainfall has made soil moist, wheat soon sprouts. By March, crops are standing and feeling the "latter rains," whose brisk watering promotes maturity.

Christ indicated the mystery of growth in his parable of the planter who was so much interested in his crop that, after sowing, he rose up even at night to see how it was developing and yet could get no clue to its upspringing. He just had to admit that he did not know how it happened and was content at the harvest to thrust in his sickle and cut the grain. Even so is the mysterious growth of the Kingdom, said Christ (Mark 4:26-29). So, too, the maturing of the tiny mustard seed in the herb garden (Mark 4:31-32).

We have seen in the Beth-shan room of the University Museum in Philadelphia an iron hoe from Egyptian Thebes of c.1500 B.C. A hoe is referred to by Isaiah (5:6). Mattocks were included in the list of farm tools sent by Israelites to Philistine forges for sharpening (I Sam. 13:19-21). Our illustration 4 shows Palestine peasants using mattocks.

Paul lived among farmers, although he himself was a craftsman. And from the fields he drew his famous formula for co-operation, "I planted, Apollos watered; but God giveth the increase" (I Cor. 3:7).

HAPPY HARVEST TIMES

REAPING

When Jesus described harvests as so plentiful that the usual family farm hands were insufficient and neighbors were too busy with their own work to be drafted, he revealed the normal state of Palestine in reaping season (Luke 10:2). Desiring to garner safely before fear of destruction by heavy dews and rodents pushes every available helper into the fields, old and young participate in the harvest. Children who had watched the heavy work of plowing in October and November mud were glad to

see their fathers coming at last "with joy, bringing their sheaves." Babies in woolen cradles on their mothers' backs; cousins, uncles, servants, and hired workers who followed the harvests from place to place as migrants do today—all these lived out in the fields, the owner sleeping close by the crops, in mud huts or leafy booths, lest wild beasts or robbers steal (illus. 10). With water jars to slake their thirst, and simple foods such as *leben*, or sour milk, coarse bread, and early figs shared under a tree, the happy group toiled from dawn until dusk.

The months of the harvest stretch on from April, when barley ripens in the warm Jordan Valley, through August, when wheat is garnered from the highlands of Transjordan and the rich Hauran fields. *Dhurah*, a coarse but popular variety of millet, is cut also in July and August.

The sickle is the universal implement of reaping, a tool of such great antiquity that we find prehistoric Mesopotamian sickles of serrated flint teeth set in rounded wood suggesting the jaw of an ox. The oldest Egyptian sickles were of flint set in straight wooden shaft-handles. Natufian sickles of 10,000 years ago were of serrated flint mounted in straight bone handles. Arab Palestinian farmers today call small sickles used by women the *qalush*, and the large one wielded by men the *manjal*. An old Arab sickle song tells of sending a sickle to be sharpened by a goldsmith, who demanded a costly perfume box in return for his labor. Another tells of a lazy Arab who reaped with a tiny sickle and said that, since this would not do his work, he would sell it in the market and rest forever from harvest toils (see Grace Crowfoot's *From Cedar to Hyssop*).

Grasping handfuls of the grain, the harvesters cut it in little wisps (illus. 5), which they later bind together with pieces of straw. Often the harvesters turn up the lower part of their dresses or cotton coats, making roomy bags which they fill with as much grain as they can carry. In the exquisite harvest story of Ruth (3:15) we read that Boaz, the rich landsman of Bethlehem, said to the maiden, "Bring the mantle that is upon thee, and hold it; and she held it; and he measured six measures of barley, and laid it on her."

Reaping-hooks of flint teeth set in semi-circular pieces of wood (the latter now disintegrated) have been found by the Petries on the mound of Gerar, above the camping-ground and farm of Isaac, who "sowed in that land, and found in the same year a hundredfold" (Gen. 26:12). "And the man waxed great . . . until he became very great" (v. 13).

BINDING

Dhurah is cut near the top of the heads because its stubble has little value.

Wisps of wheat and barley, after being cut, are tied into little bundles and carried on carts, camels, or shoulders and heads of men to the nearest threshing-floor. Do you remember Joseph's dream, where he saw his own sheaf taller than those of his brothers: "behold, we were binding sheaves in the field, and lo, my sheaf arose . . . and . . . your sheaves made obeisance to my sheaf" (Gen. 37:7)? There is quite a Babylonian whiff to this picturesque field scene, suggestive of cults ancient in the time of Abraham of Ur. Women and children sit down and patiently weed out tares, which Jesus in his parable advised them to let grow with the grain until the harvest, because they so resemble the wheat that plucking them up before the crop is ripe might destroy the good wheat: "Gather up first the tares, and bind them in bundles to burn them; but gather the wheat into my barn" (Matt. 13:30).

GLEANING

The gleaning process follows the reaping. Ruth the Moabitess gathered what remained in the corners, following the old Hebrew law commanding that such remnants be left for the poor. To the fertile fields of Transjordan Naomi had gone when Bethlehem, usually generous in its yield, suffered famine. And now, back to Bethlehem flowed the farm migrants immortalized in the Book of Ruth.

Boaz' sleeping among his precious reaped crops indicates the customary guarding of harvest by a member of the community, delegated to stay sometimes in a leafy watchtower on a high point overlooking the fields (illus. 10) and again on a cot down in the midst of the produce.

Boaz was one of the "lords of the harvest" who had authority to rouse his toilers from their beds before dawn, send them into the fields, and compel them to work for several hours before halting for breakfast. We have seen this salvaging of precious cool hours of early morning on farms in southern Judaea, where farm hands were revolting in a grumbling demand for the right to eat before further labor. About ten o'clock they were allowed to halt. And again they would rest between twelve and two under a tree with stones for pillows, as we ourselves have enjoyed doing.

THRESHING

Camels carry the heavy loads of golden grain to the nearest stone-paved threshing-floor. We have seen camels completely hidden by their cargo of wheat, looking like fields on legs (illus. 12). In ancient Bible times, ox-carts were used to transport cut grain to the threshing-floor. Sometimes the team is driven onto the roof of a large, flat-topped house on the side of a hill for the threshing.

The threshing-floor, located at the edge of a village, is used by all the crop-raising families of the neighborhood. It circles a high piece of ground. It turns up at the edges and is paved with stone or with tramped-down mud grown stone-hard through centuries of use. Golden forkfuls of grain are tossed onto the floor to the depth of about $1\frac{1}{2}$ ft. Then a small boy, or pair of boys, or women stand on the threshing-board, driving it around and around over the sweet grain to loosen the kernels. The iron-shod feet of the oxen, asses, or camels pulling the board help in the process. Riding a threshing-board is considered fun, for a few hours, especially by children (illus. 8). See I Chron. 13:9 for oxen stumbling on a threshing-floor.

The *threshing-board* (illus. 7) is a wooden sledge 4 ft. long, upturned at the front and carrying on its lower surface sharp teeth of stone, lava, or bits of iron.

Moses urged the people never to muzzle their oxen when threshing. Only mean farmers prevent the animals from enjoying mouthfuls of sweet kernels as they work: "Thou shalt not muzzle the ox when he treadeth out the grain" (Deut. 25:4).

In farm sections inaccessible to threshing-floors, women beat the corn out of the ears with heavy wooden mallets or long sticks called "flails" (illus. 6). Hence, the phrase of the Psalmist: "Then did I beat them [enemies] small as the dust" (Ps. 18:42).

The most important threshing-floor narrative in the Bible is recorded in I Chron. 21:18-27. David, at God's instruction, commandeered a hilltop threshing-floor where Ornan the Jebusite was separating summer wheat on the Judaeian plateau which later became the city of Jerusalem. The farmer was willing to give his floor outright to the king; to chop up his threshing-board to make firewood for the royal sacrifice; and to surrender his oxen for burnt offerings and new grain for a meal-offering. But David insisted upon paying "six hundred shekels of gold by weight." From that time until the present, this ancient stone threshing-floor above a prehistoric cave has been a center of worship. It was the open-air altar first of the Temple of Solomon and then of later Temples. Today it stands under the Dome of the Rock, sacred place of prayer for Moslems (illus. 235). During the Crusades it was the central feature of a domed church (formerly a mosque), and around it Crusaders built a handsome iron grille-work, which stands today.

WINNOWER

From May through September, about ten every morning a refreshing breeze blows from the Mediterranean as far as two hundred miles inland. It continues until sunset and helps farmers separate the grain from the chaff or straw. Standing on the threshing floor, with a wooden fork they toss bunches of threshed wheat into the air, letting the breeze blow away the chaff, while the heavy grain falls to the threshing-floor (illus. 9). Jesus as a boy, at the well-known Nazareth threshing-floor, often halted to help and to admire the beauty of the scene, which John used in one of his lessons: He will "gather the wheat into his garner (barn); but the chaff will he burn up with unquenchable fire." Jesus remembered the Psalmist's words, the wicked people "are like the

chaff which the wind bloweth away."

For winnowing, early Egyptian and Palestinian farmers used also wooden fans, or shovel-like scoops, such as we have seen in the Beth-shan Room of the University Museum in Philadelphia, dating from c.1500 B.C. An imaginative picture accompanying the Beth-shan exhibit shows "farmerettes" of that early date, each equipped with two wooden fans. These fans are about 5 in. wide and 14 in. long, with slits to reduce resistance. The girls dip up the grain between their two fans, part the scoops, and allow the grain to fall to the ground, separated from its chaff: "the oxen likewise and the young asses that till the ground shall eat savory provender, which hath been winnowed with the shovel" (Isa. 30:24).

Both Matthew and Luke record John the Baptist's reference to a mighty harvester who was coming, "whose fan is in his hand, and he will thoroughly cleanse his threshing-floor; and he will gather his wheat into the garner, but the chaff he will burn up with unquenchable fire" (Matt. 3:12).

The chopped-up straw was used for fodder (*tibn*).

SIFTING

After winnowing comes the sifting. Women hold huge, round traylike sieves to separate further the grain from its coarse chaff. The time from sieve to mill and oven is brief, and it is no easy task to rid the grain of small stone and dung remaining after the winnowing.

GRAIN TRANSPORT

When grain was consigned by Syria and Palestine to Egyptian overlords, it was hauled by camel to Byblos or Joppa for loading on waiting boats. Caravan trains of stately camels are today the most picturesque part of the harvest scene. Many sacks loaded on their humped backs, the majestic animals are strung together, five or eight in a long chain, with jingling bronze bells tinkling out the rhythm of their slow walking. You can hear a camel train coming half a mile or more away. Jesus as a little boy in Nazareth was always

thrilled when he saw camel trains loaded with bulging sweet grain coming down from the vast wheat country in the Hauran (illus. 12). Always a humble brown donkey leads the haughty camel train. The cameleer, or driver, rides on the donkey. All the animals wear necklaces of blue beads "to keep the evil eye away" and to protect them "from all harm."

I cannot describe, I cannot explain,
The thrill I get from a camel train.
A camel train with burdens and bumps
And beads and bells and laden humps,
As it comes from markets of old Baghdad
With grains and rugs I should like to have had.
A camel train, by its donkey led,
A camel train with its cords of red,
A camel train on thistles fed,
Yet stalking along with a regal tread.

I have tried and tried, but it's all in vain
To tell the charm of a caravan train.
You must go yourself to Judah's edge
Or stand by Nazareth's cactus hedge
And you'll follow yourself the caravan
On trails that were old when time began.

—M. S. M.

AGRICULTURAL PESTS

One of the banes of the farmer in Bible lands has always been periodical invasions of locusts. They come from central Arabia and the Sudan, making their way into cultivated areas of Egypt and Palestine every ten or fifteen years. Major Jarvis, in *Yesterday and Today in Sinai*, tells of scientific government campaigns to outwit this plague which tormented the Egypt of the Pharaohs prior to Israel's Exodus. Methods of attack include fighting by flame-guns, collection of eggs, digging of chemically treated trenches, and spreading of arsenic mixed with damp bran. "And the locusts went up all over the land of Egypt . . . they covered the face of the whole earth, so that the land was darkened; and they did eat every herb of the land . . . and there remained not any green thing" (Ex. 10:14-15). This catastrophe, for the dispelling of which Pharaoh summoned the Hebrews "Moses and Aaron in haste," is a pest exacting as much skill from soldiers and agricultural experts in the Near East today as it did in ancient times. As much as a million dollars has been expended in one antilocus campaign by the present Egypt.

tian government to prevent locusts from coming into Egypt from Sinai.

Other field pests in Old Testament times were mice. These gnawed the bow-strings of invading Assyrian archers and ate the thongs by which they carried their shields.

The prophet Joel refers to other field pests—armies of cankerworms, palmer worms, and caterpillars (Joel 2:25).

AGRICULTURAL PRODUCTS

Better is a dinner of herbs, where love is,
Than a stalled ox and hatred therewith.

—Prov. 15:17

This cozy maxim gives a clue to Hebrew ideals in ancient times.

People of Bible lands have always lived chiefly on cereals and vegetables. Meat was for festive occasions. Food deficiencies they experienced in times past are being met today by such agencies as the Nathan and Lina Straus Health Clinic of Jerusalem and government child-health stations.

CEREALS

Barley was the food of poor folk and well-fed animals. It is listed together with wheat in the notation of fat blessings held out to the Children of Israel by the God who was leading them through barren wilderness. The Promised Land had not only "stones of iron," hills from which copper could be dug, water-brooks, springs, olive trees, and honey; it was "a land of wheat and barley" (Deut. 8:8). One of the loveliest pastoral stories in the Bible, the Book of Ruth, has to do with a barley field. Since earliest Bible times, barley has been cultivated. The Book of Exodus refers to a calamitous time when "barley was smitten" in the ear (Ex. 9:31). It sold for half the price of wheat (II Kings 7:1).

Corn, as we have said above, is a term covering many varieties of cereal in Scripture. At least eleven Hebrew words are translated "corn." Anything from fine wheat to spelt may be meant. Spelt is inferior wheat.

Millet, referred to in Ezek. 4:9, is a sturdy plant not worthy the name "cereal,"

but it produces large, rounded heads made up of "a thousand" seeds, suggesting its name "millet." We see this *dhurah* growing in the poorest soil today, and natives gather it in July to mix with true grain for bread.

Wheat was the chief crop desired by Israel. When Joel rhapsodized about God's goodness to His people he declared, "The floors shall be full of wheat" (2:24). The Psalmist refers to favored people who were "fed with the finest of the wheat" (Ps. 81:16). Jesus alludes to a bumper wheat crop gathered into a roomy garnering-place (Matt. 3:12). John takes one of his finest metaphors from the grain of wheat which must fall into the earth before it can be resurrected into the food of life (12:24).

Fitches, yielding black seeds used to flavor bread, and *cummin*, a plant used in flavoring candy, were regarded as weeds which had to be cleared before legitimate crops of wheat and barley were sown in the furrows (Isa. 28:25). The field-minded prophet adds that fitches are not threshed with a sharp threshing-board as the bread-grain is, but their seeds are beaten out with a rod.

The remarkable storage jars unearthed by John Garstang and others at Jericho contained the following Palestine grains which had lain there since before one of the early burnings of that hoary city in the fertile oasis of the Jordan Plain: wheat, barley, oats, millet, and lentils. So to our list of Bible grains we add oats. These grains would not sprout if planted now. But neither would they harm excavators if eaten.

Flax was widely grown, to provide linen thread woven into priestly garments; and for twine. We know that flax was raised in Jericho Plain because Rahab hid the spies of Joshua on her roof and concealed them with "stalks of flax which she laid in order upon the roof" (Josh. 2:6). The fine linen woven for her family by the virtuous housewife, described in Proverbs (31:13, 22), was possible because she diligently sought flax, as well as wool, in her local markets.

The tare of Christ's parable is believed to have been darnel grass, with poisonous properties. It resembles wheat closely until both, growing together, are ripe.

VEGETABLES

Egypt taught Israel the cultivation of many luscious vegetables to add to the list they already knew. The Book of Numbers (11:5) says: "We remember the fish, which we did eat in Egypt for naught"—so plentiful was it in the wide Nile—"and the cucumbers, and the melons, and the leeks, and the onions, and the garlic." This sounds like a recipe for the tasty goulash of savory fleshpots for which the wanderers later longed.

To the above list of vegetables in ancient Bible lands Albright adds lettuce, from about the third or fourth millennium B.C.

Cucumbers were as prized throughout Syria, Egypt, and the ancient Near East as they are in the Balkan lands today, and their value justified erection of booths where watchers remained day and night to protect them from jackals or neighbors (Isa. 1-8).

Mandrakes were considered worth quarreling about by Rachel and Leah when Reuben brought them in from the wheat field. These may have been a tuberous plant similar to our potatoes. They were sometimes called "love apples." The super-

stitious believed them conducive to human fertility (Gen. 30:14 and Song of Sol. 7:13). They have narcotic properties.

Wild greens enjoyed by Palestinians are: common mallow, palatable when cooked with rice, butter, and vinegar; other greens known as "bull's tongue," "elephant's ear," milk thistles; a kind which Arabs call *akkub*; wild artichokes known to Arabs as *kharshuf*; sorrel (spinach); dandelions ("monk's salad"); chicory; and various other roots and bulbs. For an interesting account of these greens, we commend *From Cedar to Hyssop* by Grace M. Crowfoot and Louise Baldensperger (Chapter 3).

Peas and lentils, prized for pottage (Gen. 25:30), have been grown since ancient times. Lentils, or vetch-seeds, belong to the pea family but have smaller, more decorative leaves. They are pulled up by hand, not cut down with sickles. Beans, horse-beans, and chick-peas were also anciently cultivated for rich proteins. Pulse was edible when parched. Carob pods (from trees) were fit for swine and prodigals only (Luke 15:16).

(For herbs, spices, etc., see *Flowers, Herbs, Trees.*)

ADDITIONAL BIBLE REFERENCES

Note.—Because Bible lands were largely agricultural, unusually generous references are here made to agricultural processes.

"Be glad then, ye children of Zion, and rejoice in Jehovah your God; for he giveth you the former rain in just measure, and he causeth to come down for you the rain, the former rain and the latter rain . . . and the floors shall be full of wheat" (Joel 2:23, 24)

"He will come down like rain upon the mown grass" (Ps. 72:6)

"Thou visiteth the earth, and waterest it, Thou greatly enrichest it;
The river of God is full of mercy"

"Thou waterest its furrows abundantly;
Thou settlest the ridges thereof:

Thou makest it soft with showers"
(Ps. 65:9, 10)

"your Father . . . sendeth rain on the just and the unjust" (Matt. 5:45)

God "gave you from heaven rains and fruitful seasons, filling your hearts with food and gladness" (Acts 14:17)

"on the morrow, and pressed the fleece together, for he rose early and wrung the dew out of the fleece, a bowlful of water" (Judg. 6:38-40)

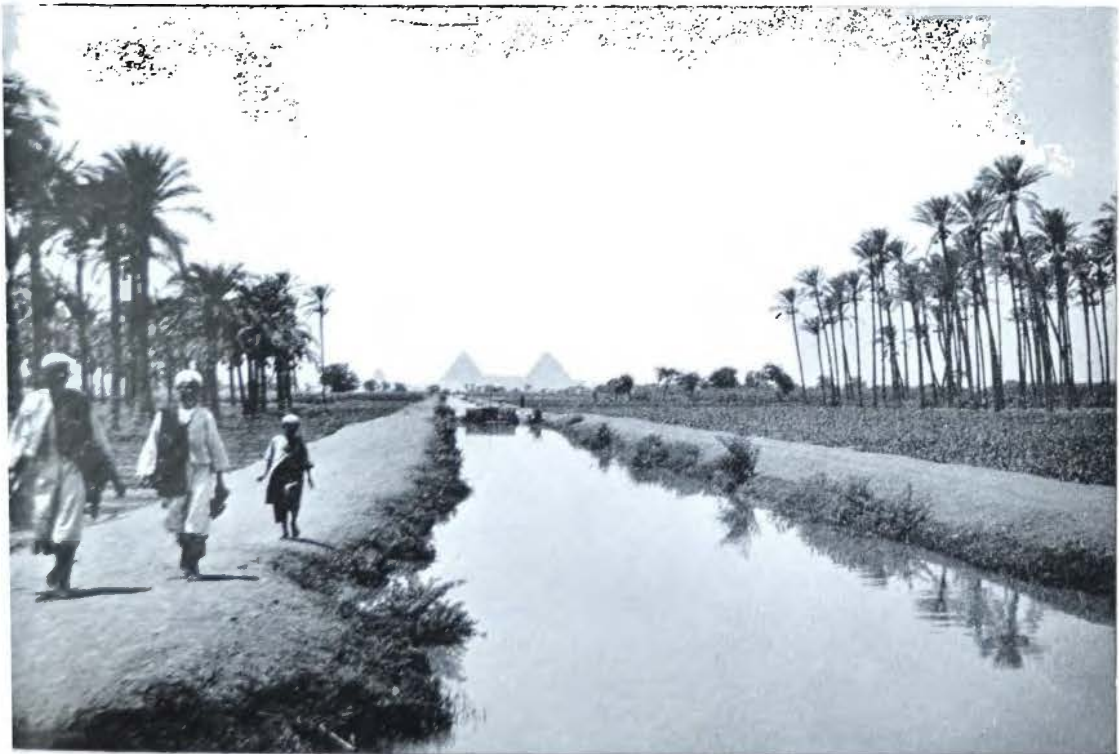
Hosea declares that God considered the morality of Judah and of Ephraim as "a morning cloud, and as dew that goeth early away" (Hos. 6:4)

"an east wind shall come, the wind of the Lord shall come up from the wilderness, and his spring shall become dry" (Hos. 13:15)



12. Camels transporting grain from fields to threshing-floor, Syria.

13. Where Nile canals make the Delta bloom: irrigated cotton fields and date groves with three Pyramids of Gizeh in the distance. Footpaths are hardened by millenniums of use.



"we had sailed slowly many days . . . the wind not suffering us" (Acts 27:7)

"when the south wind blew softly" (Acts 27:13)

"a tempestuous wind, which is called Euraquilo" (Acts 27:14)

"the ship . . . could not face the wind" (Acts 27:15)

"Isaac sowed in that land" (Gen. 26:12)

"sow fields, and plant vineyards" (Ps. 107:37)

"thou wentest after me in the wilderness, in a land that was not sown," said Jehovah to Jeremiah, of Israel (Jer. 2:2)

Referring to custom of setting captives to plowing, "he will set some to plow his ground" (I Sam. 8:12)

"foreigners shall be your plowmen" (Isa. 61:5)

"The oxen were plowing, and the asses were feeding beside them; and the Sabeans fell upon them, and took them away" (Job 1:15)

"they that plow iniquity . . . reap the same" (Job 4:8)

"they shall beat their swords into plowshares" (Isa. 2:4). This passage reflects not merely a scarcity of metal in Palestine but the ageless longing for peace. The same words are used by the prophets Micah (4:3) and Joel (3:10).

"Behold, the days come, saith Jehovah, that the plowman shall overtake the reaper, and the treader of grapes him that soweth seed" (Amos 9:13). Here is a wonderful picture of times so prosperous that one season tramples the heels of the next.

"One soweth, another reapeth . . . others have labored, and ye are entered into their labor" (John 4:37, 38)

"Thou knewest that I am an austere man, taking up that which I laid not down, and

reaping that which I did not sow" (Luke 19:22)

"I will sow them among the peoples; and they shall remember me in far countries; and they shall live with their children, and shall return" (Zech. 10:9)

"And they of Beth-shemesh were reaping of their wheat harvest in the valley; and they lifted up their eyes, and saw the ark, and rejoiced to see it" (I Sam. 6:13)

"Behold the birds of the heaven, that they sow not, neither do they reap, nor gather into barns; and your heavenly Father feedeth them" (Matt. 6:26)

"He that reapeth receiveth wages, and gathereth fruit unto life eternal. . . . One soweth, another reapeth" (John 4:36, 37)

"He that soweth sparingly shall reap also sparingly . . . God loveth a cheerful giver" (II Cor. 9:6, 7)

"he that soweth unto his own flesh shall of flesh reap corruption; but he that soweth unto the Spirit shall of the Spirit reap eternal life. And let us not be weary in well doing: for in due season we shall reap if we faint not" (Gal. 6:8, 9)

"He that goeth forth and weepeth, bearing seed for sowing, Shall doubtless come again with joy, bringing his sheaves with him" (Ps. 126:6)

"When thou reapest thy harvest in thy field, and hast forgot a sheaf in the field, thou shalt not go again to fetch it: it shall be for the sojourner" (Deut. 24:19)

"as when one gleaneth ears in the valley of Rephaim" (Isa. 17:5)

"there shall be left there in gleanings, as the shaking of an olive-tree" (Isa. 17:6)

"when ye reap the harvest of your land, thou shalt not wholly reap the corners of thy field, neither shalt thou gather the gleanings of thy harvest . . . thou shalt leave them for the poor and for the sojourner" (Lev. 19:9, 10)

"that David should go up, and rear an altar unto Jehovah in the threshing-floor of Ornan the Jebusite" (I Chron. 21:18-28)

"Behold, I have made thee to be a new sharp threshing instrument having teeth" (Isa. 41:15)

"The daughter of Babylon is like a threshing-floor at the time when it is trodden; yet a little while, and the time of harvest shall come for her" (Jer. 51:33)

"to sift the nations with the sieve of destruction" (Isa. 30:28)

"I will sift the house of Israel . . . like as grain is sifted in a sieve, yet shall not the

least kernel fall upon the earth" (Amos 9:9)

"Simon, Simon, behold, Satan asked to have you, that he might sift you as wheat" (Luke 22:31)

"Six days shalt thou work, but on the seventh day thou shalt rest: in plowing time and in harvest thou shalt rest" (Ex. 34:21)

"The harvest is past, the summer is ended" (Jer. 8:20)

"I also have withholden the rain from you, when there were yet three months to the harvest" (Amos 4:7)

BIBLIOGRAPHY

- Albright, William F., *From the Stone Age to Christianity*, The Johns Hopkins Press, Baltimore.
- Breasted, Charles, *A Pioneer to the Past*, Charles Scribner's Sons, New York.
- Breasted, James H., *Ancient Times*, Ginn and Company, New York.
- Carleton, Patrick, *Buried Empires*, Edward Arnold & Co., London.
- Chicra, Edward, *They Wrote on Clay*, University of Chicago Press, Chicago.
- Childe, Gordon, *New Light on the Most Ancient East*, D. Appleton-Century Company, Inc., New York.
- Crowfoot, Grace M., and Baldensperger, Louise, *From Cedar to Hyssop*, The Sheldon Press, London.
- Crowfoot, John W., and Grace M., *Early Ivories from Samaria*, Palestine Exploration Fund, London.
- Duncan, J. Garrow, *Digging Up Biblical History*, The Macmillan Company, New York.
- Glueck, Nelson, *The Other Side of the Jordan*, American Schools of Oriental Research, New Haven, Conn.
- Jarvis, C. S., *Yesterday and Today in Sinai*, Houghton Mifflin Company, Boston.
- Petrie, Lady Hilda, *Sidenotes on the Bible*, Hutchinson & Co., Ltd., London.
- Sample, Ellen C., *The Geography of the Mediterranean Region*, Henry Holt and Company, Inc., New York.
- Steindorff, George, *Egypt*, J. J. Augustin, Inc., New York.
- Steindorff, George, and Seele, Keith, *When Egypt Ruled the East*, University of Chicago Press Chicago.
- Woolley, Sir Leonard, *Ur of the Chaldees*, Charles Scribner's Sons, New York.

ANIMALS

For every beast of the forest is mine,
And the cattle upon a thousand hills,
I know all the birds of the mountains;
And the wild beasts of the field are mine.

—Ps. 50:10, 11

Introduction	Dogs
Animals of the Bible Village Family	Fish
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Camels	Foxes and Jackals
Domestication	Gazelles
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INTRODUCTION

ANIMALS IN THE BIBLE VILLAGE FAMILY

People in Bible lands have always valued their animals. These constituted their wealth in ancient times. But there was also a primitive sense of companionship between dumb beasts and lonely occupants of damp caves and mud-reed huts. An instinctive response of life to life made God's creatures huddle together. This survives as a racial memory every time a little boy below Bethlehem nowadays goes out to help his brothers with the family flocks.

This early sense of camaraderie between men and animals soon showed up in art, especially in Babylonia and Egypt, and it inevitably penetrated into forms of worship. Of both these animal influences we shall speak below.

The unscientific narrator of the opening pages of Genesis gave a not-after-all-unscientific enumeration of the earliest animals of which ancient peoples in Bible lands were aware: "Swarms of living creatures," the first-mentioned animals, sound like material seen by the biologist today under his microscope. Next in sequence, "God created the great sea-monsters," then, winged birds and "creeping

things," cattle and beasts of the earth, with "every green herb for food" (Gen. 1).

Not long after the dawn of agriculture man began to tame wild animals to help him farm. All domestic animals were once wild. There soon grew up a quartet of farm animals which runs all through Scriptures: ass, camel, ox, and sheep. Note our omission of the horse (see p. 37).

This ancient quartet of Bible animals has been whimsically praised in a Christmas carol, "The Friendly Beasts," set to music by Clarence Dickinson:

Jesus our Brother, strong and good,
Was humbly born in a stable rude.
And the friendly beasts around him stood,
Jesus our Brother, strong and good.

'I,' said the donkey shaggy and brown,
'I carried his mother up hill and down,
I carried her safely to Bethlehem Town,
'I,' said the donkey, shaggy and brown.

'I,' said the cow all white and red,
'I gave him my manger for his bed,
I gave him my hay to pillow his head,
'I,' said the cow, all white and red.

'I,' said the sheep with curly horn,
'I gave him my wool to keep him warm,
I gave him my coat on Christmas morn,
'I,' said the sheep with curly horn.

—Robert Davis*

The Patriarch Abraham in his nomadic days (c.1728-1686 B.C.) had so many sheep, oxen, "he asses . . . and she-asses," and cattle that his herdsmen and those of his nephew Lot fell into bitter competition for wells and pasture (Gen. 13:6). The respect of neighbor for neighbor in the matter of grazing rights was ingrained in the conscience of every Israelite. "Thou shalt not covet thy neighbor's . . . ox, nor his ass." And when local wars raged, a prophet like Samuel advised his king, Saul, to pursue a scorched-earth policy against Amalekites and destroy utterly their "ox, and sheep, camel, and ass" (I Sam. 15:3).

As soon as settled occupation of Canaan became possible, every Hebrew family living in a mud-brick village longed to have a few animals to assist in daily tasks of wresting food and clothing from the land. They saw their Canaanite neighbor farm families doing this. They were quick to

adapt themselves to the serene way of life for which they had struggled from Egypt through the wilderness into the Promised Land.

They were careful to conserve their animals, which they housed in the lower portion of their one-story homes, as they do today, building a platform where the family activities go on. When the animals were brought in from the stone-walled corral where they were folded during mild weather along with animals of neighbors, they returned gladly to the old limestone manger, or eating-trough (illus. 21), set conveniently low on the earth-floor of the home. One of these mangers, says Luke, was the first cradle of the infant Jesus: "Mary brought forth her first-born son. . . . and laid him in a manger" (Luke 2:7). Lined with sweet straw, the manger made a not-too-uncozy "basinette." A real Bethlehem manger, now in the Children's Chapel of the Hanson Place Central Methodist Church, Brooklyn, helps teachers to correct the damage done the manger concept by the world's great artists who have painted it as a wooden trough on trestles, or as a woven basket, or as a thing looking like an ancient bathtub. A blue and green faience manger, in the form of an Egyptian lotus flower from which an early Roman (first century A.D.) ram is enjoying his meal, is owned by the Metropolitan Museum of Art in New York.

When mangers were shared by several animals, they were larger and had partitions. The crib familiar to the ass (Isa. 1:3) was a pile of straw.

THE AGE-LONG QUARTET

Let us look at the four chief animals in Scripture:

ASS AND DONKEY

Darwin believed that the ass originated in Abyssinia. He was "cousin to the zebra," quite unlike the donkey we know.

Our knowledge of him goes very far back. He appears in Sumerian art as early as 3000 B.C. (illus. 108). Long before the camel and the horse, he was at work. In his wild state he was wonderfully described by Job, who says that he made his home

* By permission of author.

in the wilderness, in the salt lands, scorning "the tumult of the city," not heeding the shouts of a driver but swiftly ranging the mountains for wide pasture, searching after "every green thing." This same thirty-ninth chapter of Job is thrilling for its profound observations of other natural life—wild ox, ostrich, horse, and hawk. No writer of ancient times has so eloquently described animals as Job, whether horse or monsters now obsolete (see Job 38-41).

Isaiah told of ruins of ancient cities being "the joy of wild asses" (Isa. 32:14). Jeremiah vividly pictured wild asses standing on bare heights, panting for air like jackals, with eyes failing "because there is no herbage" (14:6).

ASSES AND TRANSPORT

In larger numbers than any other animal, the dependable ass has helped the family in every Mediterranean land from Spain to Syria. His paths run everywhere. Where his sure little feet cannot climb, neither can man. Sometimes he is so tiny that the feet of his long-legged rider touch the ground. He is far from stupid. Once, riding from Bethlehem through the Judean wasteland to Tekoa of Amos, our road came to a dead end. We dropped our reins. We were bewildered. But our donkeys found the way for us.

The two most famous Bible incidents in which asses play a part are the flight of Joseph, Mary and the Christ Child into Egypt (Matt. 2:14)—a journey implying the donkey, although it is not mentioned because its use was so obvious; and the Palm Sunday ride of Jesus who commandeered the little ass, the colt or foal of an ass, and came riding down the Mount and up to Jerusalem on a colt "whereon no man ever yet sat" (Mark 11:2). Kingly mount, lowly manner, mastery over even the untamed!

The son of David, rebellious Prince Absalom, was riding on an ass when he was accidentally hanged as "the mule went under the thick boughs of a great oak, and his head caught hold of the oak, and he was taken up between heaven and earth; and the mule that was under him went on" (II Sam. 18:9). Normal procedure on the part of the animal, but a fatally eccen-

tric mode of hair-do on the part of the prince. Probably this royal mount was an ass, not a mule. So, too, the mount of traitorous Ahitophel, who "saddled his ass . . . and gat him home" (II Sam. 17:23).

"And when he had saddled his ass" is the introduction to many an Old Testament journey narrative. When Jesse, the admirable Bethlehem father, sent his youngest son, David, to visit Saul at the king's request, Jesse "took an ass laden with bread, and a bottle of wine, and a kid, and sent them by David his son unto Saul"—a sight so pleasing to the jaded monarch that, when the youth stood before him, "he loved him greatly" (I Sam. 16:20, 21).

The ancient folk tale of Balaam and his talking ass (Num. 22) reflects the intimacy between the Palestine beast and his owner. When this ass scraped his master against a rocky ledge on a narrow path and then mysteriously lay down, for which unwonted conduct Balaam beat him with his stick, the little creature, after the manner of Aesop's or Walt Disney's animals, rebuked him, "Am I not thine ass, upon which thou hast ridden all thy life long unto this day? was I ever wont to do so unto thee?" Owners beat their donkeys mercilessly in Bible lands today.

When families in Palestine change the location of their tents, the patient ass carries the household effects. On journeys he hauls the children in sacks slung to his sides or carries tired father while mother trails along behind in the dust of his heels. When she does ride, she sits sideways, as 4,000 years ago women rode, often spinning as they went.

The ass responds to frequent kicks from the feet of his rider. He bears the farmer to distant fields or to market. For transport he is better than a horse, since he requires less water and food and can endure heavier loads. For centuries strings of asses were the only freight carriers in Palestine.

The donkey is paradoxical. Most valuable animal to the family, he is yet the cheapest, for he eats only one-fourth as much barley as a horse. Even poor families, like Joseph's at Nazareth, could afford one ass and trim him with blue beads and red wool to show their regard. Most menial of animals, nevertheless, he heads the long, stately strings of camels as they cross the

desert or silhouette themselves against the blue Mediterranean en route to Egypt, for he carries the cameleer of the pack train. Associated with lowliness, yet the ass, especially a white ass, was in Old Testament times the mount of royalty. When domestic donkeys were bred with wild asses, their foals were often as prized as horses.

A right royal Old Testament incident in which asses figure is related in II Sam. 16:1, 2. When David was suffering the insurrection of his son Absalom, the lame Mephibosheth, heir-apparent to Saul's throne, thought the moment opportune to put in his claims. "And when David was a little past the top of the ascent [of the Mount of Olives], Ziba the servant of Mephibosheth met him, with a couple of asses saddled, and upon them two hundred loaves of bread, and a hundred clusters of raisins, and a hundred of summer fruits, and a bottle of wine." The asses, the servants said, were "for the king's household to ride on."

The ass in Bible lands today is the "Ford" or "jeep." We have often seen a donkey tied beside an ancient stone house-door in Bethlehem and other villages, as the ass was tethered at Bethphage on Palm Sunday morning.

Mosaic law forbade the harnessing of ass and ox together. The heavier farm work, such as plowing, was done by heifers, bullocks, and oxen.

LOST ASSES

Asses had a way of wandering over brown Judean hills and getting lost among rocks and dry stream beds. A famous story of lost asses concerns the early career of Saul. The futile pursuit of his father's herd of asses through the hills of Ephraim, Shalishah, and the country of the Benjamites led his servant to suggest that his father would be worried about the youth as well as the animals and that they had better consult a prophet, a seer in the land of Zuph. This proved to be the hospitable Samuel, who later anointed Saul to be the first king of Israel. The narrative of I Sam. 9 is full of human interest.

CAMELS

When Bible writers wished to give an impressive setting to a narrative, they

framed a stately pageant timed to the rhythm of jingling camel trains. Recall the story of Rebekah, whose betrothed Isaac went at evening into a field to meditate and to watch for his bride: "and he lifted up his eyes, and saw, and behold, there were camels coming" (Gen. 24:63). For he had sent ten camels, loaded with gifts, into Mesopotamia to woo the fair daughter of Bethuel and Milcah. Again, the narrator of the Joseph saga (Gen. 37:25) tells how a caravan of Midianites, carrying spices, balm, and myrrh to Egypt, kidnaped young Joseph from the Plain of Dothan, where we have lately seen the ageless caravan trail intersecting the new macadam highway.

DOMESTICATION

William F. Albright has checked our enthusiasm for these early camel narratives by reminding us in his *From the Stone Age to Christianity* that domestic camels did not "come in" to Palestine before 1000 or possibly 1200 B.C. Elihu Grant believed that camels were not plentiful in the Syrian Desert until 1000 B.C. Wild camels, of course, abounded in ancient times in North Africa and Arabia, but many of the men we have considered as camel breeders in Scripture stories were ass herdsman. Albright finds no Egyptian obelisk hieroglyphs or early tomb wall-pictures showing camels. He recognized no camel bones in Bronze Age deposits (c. 3000-1500 B.C.) but clings to the belief that the camel-herder fragment found at Tel Halaf (Gozan of II Kings 17:6) is our first glimpse of this domesticated creature. Eloquent link, this art remnant from the river valley to which Israel was carried by King Shalmanezzar of Assyria.

The date for the final form of the narratives of the Patriarch Abraham appears to be much later than the period (around 1935 B.C.) when this historic individual came out from Ur of Sumeria towards Canaan. Yet, despite the camel anachronism, our imagination is reluctant to delete the camel picturesqueness from the Rebekah and the Joseph stories. We are happy that Isaiah's caravans of Dedanites (21:13) were historic possibilities. And we are glad that there is nothing to make it unlikely that the Three Wise Men used

camels for their stately pageant to Bethlehem at the nativity of Jesus. For, although the caravan of the Magi from the east is not mentioned in Matthew's narrative, we take it for granted that the tall camels we see in the fine-art portrayals of this majestic arrival are correctly included. Camels and Christmas somehow belong to each other.

The Queen of Sheba narrative, telling how she came to visit Solomon in Jerusalem "with a very great train, and camels that bore spices, and gold in abundance, and precious stones," is accurate in its details. For not only were camels domesticated in her era, but Sheba came from the very heart of the camel-breeding country then and ever since—Arabia, where nomads plan their very lives by the habits of the camels' food.

The translators of the American Revised Version rightly changed the old King James reference to camels in the Queen Esther narrative (8:10) to "swift steeds," which were widely used as messengers by couriers of King Ahasuerus (Xerxes) the Persian. Persians have always excelled in breeding fine horses.

FARMERS AND CAMELS

Every well-to-do Palestinian farmer in Bible times had at least one camel to help in his field (illus. 14). He ignored their "humpy, grumpy" resentment and hitched them to a homemade plow or to a threshing-board and found that the camels' long life of forty or fifty years stood him in good stead. When a farmer's camel wanders off, he is sought with feverish zeal until he turns up again—through the goodness of God, the owner declares.

Out in the desert a farmer buys a camel for what would be twelve or fifteen dollars; in the town markets he pays twice that amount; for an extra-fine breed, as much as thirty dollars. Today Syrian Arabs pay one thousand dollars for a swift, highbred racing camel. For speed is characteristic of the camel, as we read in the Samuel account of David's fight against the Philistines, of whom none escaped, "save four hundred young men, who rode upon camels and fled" (I Sam. 30:17). This is

paralleled in the *Letters of T. E. Lawrence*, who vividly describes the thrill of riding on King Feisal's racing camel across the desert in his World War I tactics against the Turks. A camel can easily outrace a horse. Lawrence tells of seeing "whole rivers of camels" drinking at water holes in Gaza Desert, as we ourselves have seen in this same spot, with fascination (illus. 230). As many as 6,000 camels constitute a fighting corps when Arabs are "at battle station."

The single-humped camel which was prized by farmers in ancient times is still the transport burden-bearer (illus. 196) in North Africa, Palestine, Syria, the Tigris-Euphrates Valley, and even Asia Minor, despite vast stretches of macadam roads and thousands of motor trucks. And when we go into the great camel markets of African Tripoli, for example, and watch what goes on there, we step instantly back into the patriarchal age of 3,600 years ago. For there the aged head sheik, in his spotless, handwoven white burnoose, receives from his sons the moneys paid for a baby camel or a heavy freight camel, or for a pack of sheep tied head to tail and head to tail. To see the family of men then sit down on the warm ground to enjoy tea brewed in the market on a charcoal stove before the whole caravan moves off south again is something we never can forget.

TRAITS OF THE CAMEL

The camel sees objects at great distances and scents water before his driver sees the oasis. His snarly temper is proverbial, as we have found when trying to ride a surly female to Saqqarah. Yet his advantage in having "an extra stomach" and a storage bin in his hump which enables him to get along for amazing stretches without nourishment more than atones for this, as well as for his very foul breath which makes his spittle most repulsive when showered upon one. But who could avoid halitosis if he ate dry thistles and brambles as staples?

The camel bears its young one at a time, taking twelve months to bear. A camel stands 3 ft. high at eight days. The baby camel suckles its mother's milk for a year and makes a picturesque sight on the high,

arid, lonely slopes of a Mount Pisgah, for example. There we have watched thin little camels wandering with their mothers above the Jordan Valley with Jerusalem in the far distance. Camels are full-grown at sixteen years and live to a ripe old age when properly cared for. They fully reward their owners. But their rearing is quite incompatible with farming.

Camels do not become really picturesque until maturity. Then, when strung together along a sandy Mediterranean shore line at sunset, casting shadows majestic and deep, they are incomparable; or when assisting in large-scale harvesting on highlands of Transjordan—rounded up at milking time with a white flag floating from the leader's harness to signal the others to come. A kneeling camel, under fig trees near a Palestinian well, is the ultimate in majestic repose. We love to watch him "fold down" his various joints until his legs are flat against the ground.

The traits of camels are described in an article by John Van Ness in *The National Geographic Magazine* for September, 1942, and in an accompanying series of photographs of "The Camel, Man's Age-old Servant." Van Ness tells how the Arabs cherish their camels with a thousand names, despite their unresponsive cynicism, their poisonous bite, their forward kicks, and their stupidity. They do not even notice when their driver is absent. For him they have no affection, as a sheep has for his shepherd. Yet the driver hangs on the camels' necks metal crescents which have been so used since the days of the judges, when Gideon took the crescents from camels of the slain Zebah, a king of Midianite camel breeders, whom he had pursued across the Jordan (Judg. 8). Camels fear slippery mud and, once they have skidded, have difficulty getting up at all. They have no sense about protecting human life.

GIFTS OF THE CAMEL

Offerings rich are yielded by the snobbish camel: hair, clipped in summer for the finest garments of the eastern man; milk; hide for bags and shoes; manure for fuel cakes; meat when necessary.

CARAVANSARIES

At the end of a camel's journey stand the caravansaries, a combination of wholesale warehouse, inn, and animal shelter. These are found in the great caravan cities, such as Baghdad, Damascus, and Palmyra, whose wealth was based on caravan trade with Syria, Egypt, Babylonia, and Mesopotamia. A caravansary was a quadrangle, open at the center, with an outer wall and high windows. Often, there was a fountain at the center. A colonnade ran around the space, with cell-like rooms for merchandise removed from the camels. On the second floor were rooms for the drivers. Many of the caravansaries—such as Khan Sulicman which we have visited in Damascus—had beautiful architecture, with high front portals at the entrance and domes and arches. Their odors were sometimes pleasant with spices and aromatic woods, sometimes hideous with moldy carpets and silks which had not moved promptly into the bazaars, or suks, for sale.

The camel driver is a man of responsibility. He rides on a donkey at the head of the string of camels. He veils his head to protect it on sun-blistering roads. He has plenty of time to think as he plods along. Mohammed, founder of the religion which is Christianity's greatest rival, was an Arabian camel driver, born in Mecca.

OXEN

This frequently-referred-to creature in Bible lore may mean bull, bullock, cow, heifer, or calf. It is the unit of the Bovidae family. The word "cattle," which in Hebrew originally meant "possessions," includes flocks of sheep, goats, and all herded domestic animals. Nomads' oxen, asses, sheep, and goats were included in such statements as, "Give your cattle [said Joseph] and I will give you for your cattle, if money fail" (Gen. 47:16); and "He gave over their cattle also to the hail" (Ps. 78:48). Flocks were wealth.

The bullock was the young male of the ox; bulls were male cattle; heifers were young female (cows); the ox was a castrated male bovine or stallion, a tractable worker in heavy farm tasks.

The ox, which probably came from Asia, appears to have been the first domesticated animal of the Bible-lands family. His name was synonymous with physical strength. The poorest families usually had one ox. Job implies that even a widow might have a necessary ox (24:3). When the plague of murrain fell on the cattle of the Egyptian farmers (Ex. 9:3), it was a serious threat to their subsistence.

Sometimes hitched with another ox by a wooden yoke, again with a camel or heifer, the ox opened the dry furrows to receive seeds of wheat, corn or barley. Because he helped to bring food for the family, he was honored. In Egypt he was worshipped as a god. There the "sacred bull" was carefully preserved by mummification at death and buried in a huge carved tomb, as we have seen near Memphis. This custom made the followers of the true, unseen God very angry.

The mummified bull seen in picture 17, now in the Brooklyn Museum, is the only one in the United States.

Cattle-raising, never important in western Palestine, was carried on throughout Bible times in grassy upland areas of eastern Palestine. The milking of cows is portrayed on remarkable inlaid mosaics, found at Ur in southern Mesopotamia, of the period just after 3000 B.C.

The small-scale family establishments between the Jordan and the Sea could get on well if they had their own "vine and fig tree" and a few oxen to provide their milk, cheese, and wool. "Bring me hither every man his ox" (I Sam. 14:34) reflects ownership in the time of Saul.

For use of oxen in burnt offerings of Hebrews, see page 44.

Allusions to oxen are numerous throughout the Old Testament where we learn all about them, from their grass-eating to their hauling of "covered wagons" and the ark during the Exodus trek. The lowing of oxen stolen from the Amalekites and reserved "for sacrifice unto Jehovah" led to the displeasure of Samuel the prophet. The copper (not brass) sea in the Jerusalem Temple was supported by twelve copper oxen (II Chron. 4:4). Bullocks were used in the Elijah-Baal contest on Mount Carmel (I Kings 18:23).

Jesus was just as much displeased with

the man who declined the banquet invitation because he had "bought five yoke of oxen" which he had to try out (Luke 14:19) as he was with the men who were selling oxen in the sacred Temple Area (John 2:14).

Hebrews did not raise oxen primarily for food, since they were content with vegetables and grain. But they did not refrain from legally enjoying the bullocks sacrificed as part of their worship.

FLOCKS

GOATS

Poor was the family in Bible lands that did not own at least one goat. In fact, a family could almost live from the products of a goat, that nimble little creature which belongs to the large sheep family, the Caprinae section of the Bovidae family of oxen, antelopes, sheep, and goats. Sheep and goats are closely related, but the male goat is bearded as the ram is not; his horns are different from the ram's; his odor is stronger than the sheep's.

Even families raising large flocks of goats and sheep (grazed together but not bred together) kept one goat at home for its milk and the favorite sour-goat-milk dish, leben. In goats' milk they often cooked vegetables. Mosaic law forbade cooking of a kid in its mother's milk—possibly because heathen neighbors did so. But a young roasted kid was a dish of honor, set before guests.

Some goats give 3 qt. of milk per day. All through the Mediterranean world, from Spain to Bethlehem, we have seen goats being driven to doors of homes to be milked. Sometimes their bags are covered with cloth to keep them clean. The beneficial properties of goat's milk are being recognized in our western world.

The long-eared, sleek black-and-white or brown-and-white goats are much more agile than the heavy sheep. They usually are in the forefront of flocks, tarrying to drink from Wise Men's Well near Bethlehem, for example (illus. 227). Hence the allusion of Jeremiah, "Be as the he-goats before the flocks" (50:8). They climb the dizzy heights with a sort of hyperthyroid activity. Yet they are more sensitive to cold than the longer-haired sheep.

Products supplied by goats are: hair from which tent and garment cloth, curtains and pillows are made (I Sam. 19:13); meat; milk; cheese; goatskin water bags. Even the horns of the bearded goats are utilized.

Proverbs (27:26, 27), urging diligence in care of flocks, says:

The lambs are for thy clothing,
And the goats are the price of the field;
And there will be goats' milk enough for thy
food, for the food of thy household.

Children of families look after the young kids, carrying them in their arms for pets and plucking tender grasses for them. We have seen a little girl in the heart of congested Damascus carrying her kid and its grassy fodder in her arms.

Frisky goats were compared to wicked people, and sheep, to the obedient gentle folk who like to walk near their shepherd. Hence Christ's parable of the final distinction between good and evil: ". . . he shall separate them from one another, as the shepherd separateth the sheep from the goats" (Matt. 25:32).

A goat called "a scapegoat" was at certain times chosen by drawing lots and turned loose in the wilderness to die, because the people said they had placed their sins on him and his death would redeem them.

In the Hebrew ritual of sacrifice an unblemished male goat was acceptable as a sin offering. The penitent was to kill the goat "in the place where they kill the burnt offering before Jehovah" (Lev. 4:25). The priest then dipped his finger into the blood of the goat and smeared it on the horns of the altar of burnt offering; he burned the fat of the goat upon the altar "as the fat of the sacrifice of peace offerings." Thus in Old Testament times did the priest "make atonement for him as concerning his sin, and he shall be forgiven (Lev. 4:26). This ancient custom was referred to by the author of Hebrews: "if the blood of goats and bulls, and the ashes of a heifer sprinkling them that have been defiled, sanctify unto the cleanness of the flesh: how much more shall the blood of Christ . . . cleanse your conscience from dead works to serve the living God?" (Heb. 9:13, 14).

When Isaiah referred to wild goats (13:21 and 34:14) dancing on the site of ruined Babylon and crying, he probably had in mind what the ancient Greeks called "Satyrs." The Greek drama really sprang from songs and dances in honor of the goat-god, Bacchus, half man and half animal.

SHEEP

The shepherd and his flock walk across the pages of the Bible from its early Genesis narratives of patriarchal nomads like Abram and Isaac, to the shepherds grazing their flocks below Bethlehem at Christ's nativity, and John's allusion to Jesus, "the Lamb that is in the midst of the throne of God," becoming shepherd of our souls, guiding us to "fountains of waters of life" (Rev. 7:17).

There are hundreds of references to sheep, sheepfolds, and shepherd ways in Scripture. Practically every land which was the *mise en scène* of events recorded in Scripture was a pastoral country, using rugged Mediterranean highland pastures in Greece, Italy, Assyria, Asia Minor, and Syria. Egypt was an exception. Delta farm folk found Hebrew sheep-shepherds "an abomination," even when these were father and brothers of Joseph, favored chamberlain of the Pharaoh. They detested shepherds' boorish manners and knew that sheep-raising and agriculture were incompatible.

The earliest Babylonians, who became part of the Hebrew ancestry through Abram of Ur, honored "Damuzi the Shepherd King" among their rulers who reigned before the Deluge recorded in their literature. They were happy to have their 'al-Ubaid society made up of shepherds, fishermen, and farmers, says Leonard Woolley, their great revealer to our modern age through art fragments he has found and through stratigraphic vestiges of their culture left in mud layers.

There are three varieties of sheep in Palestine and Syria today, indicates V. Gordon Childe. These three seem to spring from the three wild-sheep groups still found in Asia. The Asiatic *mouflon* we see on Sumerian vases from early Babylonia of c.3000 B.C. seems domesti-

cated at this early date. The oldest Egyptian sheep appear long-tailed, related to a breed grown in the Ural Mountains. Some authorities believe the sheep of Bible lore were the long-legged, short-fleeced variety of Asia. We like to think they were the long-fleeced, caramel-colored, broad-tailed sort which still clothe the hillside grazing places with their otherworldly beauty. How else Lev. 3:9, referring to "the fat tail entire" in sacrifice? The Greek Aristotle and the British George Adam Smith both inclined to the belief that the large, creamy, deep-wooled, curling-horned sheep existed in ancient times.

George Lamsa, author of *Shepherd of All*, believes that the first of the fat-tailed Palestinian sheep came from Kurdistan, at the head of the Tigris-Euphrates Valley, the cradle of so many pastoral, agricultural, geological, zoological, and ideological "forebears" which spread throughout ancient Bible lands. Still today in the Mesopotamian highlands there grow wild grapes, wild wheat, wild asses, and wild sheep. Lamsa states that people can live near Mount Ararat with almost no effort; he credits the belief of those who locate the Garden of a workless Eden in this part of the world.

THE FAMILY'S PET SHEEP

In Bible times every family in Palestine hoped to buy two lambs at Passover time. One they killed and ate in the festival celebrating their safe Exodus from Egyptian bondage. The other they kept as playmate for their children, who took care of it, and as an ultimate source of clothing and products for their looms and their tables. The sheep slept with the children and ate from their hands the juicy grasses they plucked for it in the cool dawn on the slopes near the town, as we have seen even on the Mount of Olives, overlooking Jerusalem. The pet sheep drank from the children's cup, as in the story, told by the prophet Nathan to David (II Sam. 12), of the poor man who had but one ewe (female) lamb. Possibly this story suggested to Jesus his parable of Matt. 12:11, 12: "What man . . . that shall have one sheep, and if this fall into a pit on the sabbath day, will he not lay hold on it, and

lift it out? How much then is a man of more value than a sheep!"

It was a sad day when the season came to kill the family's pet sheep and to put down its meat for winter in the sweet fat from its tail which sometimes weighed as much as 30 lb. and was a real burden to the animal. But from January to March there would be new lambs which would greet their parents when these returned at evening to the family fold from their grazing field, along with sheep owned by neighbors and cared for by a community shepherd. Strange, how this custom persists today even in Jerusalem, where we occasionally see sheep running in through Stephen's Gate, each finding its way to its own home.

The purity, meekness, and loyalty of the sheep for its shepherd gave a natural image to writers who thought of Jesus as "the Lamb of God" and paralleled his sacrifice on the cross in atonement for our sins to the sacrifice of the perfect ram brought to the altar as a gift to God in Old Testament times (Ex. 29:15-18). Jesus called himself the "Good Shepherd," who places his body across the sheepfold to protect against wolves and lays down his life for the sheep if necessary.

SHEPHERD WAYS FOR THE FLOCK

Since the historic David, son of Jesse, was a shepherd on the hills below Bethlehem where his great descendant, Jesus, was born ten centuries later, it has been natural to associate the name of David with the twenty-third Psalm, even if the mention of "the house of Jehovah" in verse 6 seems to throw its authorship after the erection of the Jerusalem Temple by David's son, Solomon. However, we like to feel that this allusion may be to the tabernacle or to any other place where Jehovah was worshiped. At any rate we are sure that David, as a pious Hebrew shepherd, lived out time and again the experiences referred to in the twenty-third Psalm. We are told in Ps. 78:70-72 that God chose David from the sheepfolds

To be the shepherd of Jacob his people, and
Israel his inheritance,
So he was their shepherd according to the
integrity of his heart,

And guided them by the skilfulness of his hands.

Let us use Psalm 23 as an outline of shepherd ways, beginning with its first verse, "Jehovah is my shepherd; I shall not want." This sums up the thinking of every pious Jew and Christian through the centuries.

The Psalmist, whatever his identity, certainly knew "the green pastures," every one of them, below the terraced farms of Bethlehem. He knew how to walk at the head of the sheep group, leading them (illus. 16)—not following them as western shepherds do—to rest beside "the still waters." He stayed away from torrential streams rushing to join the Nimrin, the Jordan, or the Orontes River, or the sea. The still waters known to the Psalmist were the wells, pools, and quiet rivulets or sheltered sand bars, such as we see where the Dog River enters the Mediterranean in summer. There, under a bridge, we have never failed to see drinking flocks, watched by resting shepherds who have led them from Syrian highlands. The "paths of righteousness" were age-old sheep-walks used since the beginnings of the Hebrew people.

And "the valley of the shadow," which called for extra shepherding, was the deep rock-cleft wadi where serpents lurked and brought the helpless sheep into tender dependence upon their comforting shepherd. Here they felt the touch of his helpful hooked staff, lifting them over perilous stones, and the familiar stout, short rod that had "rodded" them into the stone-walled fold time and again at nightfall. The shepherd was able to "prepare tables" in safe grassy spots, in the presence of the sheep's hereditary enemies, venomous snakes, which liked to bite the faces of unsuspecting ones. Hence the necessity of having their injured heads "anointed with oil" or butter, carried by their shepherd in an ox-horn container.

The "cup" which ran over, to the gladness of the flock, is perfectly seen today at Wise Men's Well on the northern outskirts of Bethlehem on the road which the Wise Men and Joseph and Mary used. Our illustration 227 shows "the cup" as a sensible stone trough placed beside the well, too deep for a sheep to profit by

unless his shepherd dipped up and filled his cup. The "dwelling in the house of Jehovah," with which the happy Psalm ends, is a reflection of the return to the village, where joyous families get ready after the summer grazing period to go up to the House of God, in mended garments and new-made shoes, to thank Him for all His "goodness and loving kindness" and entreat Him to let these blessings follow the family forever.

After the summer grazing, when the pasturage ran slim, there came the joyous sheep-shearing time, a festive occasion breaking the monotony of shepherd life. Then the wool profits were distributed, new cheese was passed around to all—to the one-day hirelings and permanent helpers pro rata. Several days' merrymaking followed—a custom of which Absalom, renegade son of David, took advantage when he invited his brothers to the sheep-shearing and murdered one of them, Amnon, to his father's anguish (II Sam. 13).

The loneliness of the shepherd finds compensation in the loyal love of the sheep, so superior to the heartless attitude of the camel to its driver; and in the beauty of God's out-of-doors, whose revolving seasons he knows intimately; and in the music of his homemade pipe, with which he trains some of his goats to dance.

The shepherd held an honorable position in his society. To be a slothful or sleeping shepherd was one of the worst infamies. But to the good shepherd of the community people turned always for wise advice. They felt that his nearness to God equipped him to counsel them, as Ezekiel's reference (34) to a shepherd feeding his sheep "in justice" suggests.

There are other very revealing "sheep" passages in the Old Testament. Ezek. 34: 11-16 describes the shepherd seeking, amid "cloudy and dark" weather, sheep on the mountains of Israel, to bring them to good pastures and safe folds on high places, along refreshing watercourses, or to "bind up that which is broken" and "strengthen that which was sick."

It is hard to estimate the great extent of sheep-raising in the time of David and Solomon, based on the tremendous numbers of animals sacrificed in worship. But we must remember that all the vast sheep-

raising highlands of Transjordan were at their disposal—wonderful grazing country today, as we have seen near Amman and Madeba, where sheep are turned loose to feed on the cut harvest fields. Imports were made from neighboring lands in Bible times, even as today we have seen shiploads of sheep being lifted from holds of coastwise freighters and set down limping on the quai at modern Haifa.

In the ancient city walls of Jerusalem, there was a "Sheep Gate" through which animals were driven to the Temple sacrifices. It was in the north course of the masonry, near the now-excavated Pool of Bethesda. This pool was used to bathe the sheep. Later it became an arcaded place of healing, to which invalids were carried, to lie on couches waiting for the intermittent spring to make the waters rise for the curative "troubling" (John 5).

JESUS THE GOOD SHEPHERD

The message of shepherd wisdom in the twenty-third Psalm finds completion in utterances of Jesus, as we see in his Parables of the Sheepfold (John 10), of the Lost Sheep (Luke 15:3-7), and of the Good Shepherd (John 10). Jesus, recalling how his ancestors had always thought of Jehovah as their shepherd, did not hesitate to apply to himself the shepherd image in relation to his own people. Not only did he sum up his mission in the picture of the man who, having 100 sheep and losing one, went out to seek that one straggler till he found it and brought it safely home. But he also spoke of himself as "the good shepherd that layeth down his life for the sheep" (John 10:11). "I know mine own, and mine own know me, even as the Father knoweth me. . . . Other sheep I have which are not of this fold: them also must I bring" (v. 16). Sheep he used also in his Parable of the Judgment (Matt. 25:33) and in his warning to beware of men who wear sheep's clothing to cover the actual wolfishness of their natures.

The author of Acts 8 quoted poignantly the words from Isaiah which were being read in a chariot by a man of Ethiopia on the desert road between Jerusalem and Gaza when he was met by Philip, the evangelistic apostle: "He was led as a

sheep to the slaughter, and as a lamb before his shearer is dumb, so he openeth not his mouth" (Isa. 53:7) (illus. 18). No finer summary of the spirit of Jesus could be made than is implied in this citation from the Old Testament prophet.

All through ancient times great religious leaders were thought of as shepherds. Abraham the Patriarch was a shepherd sheik. Moses the Lawgiver learned much from watching sheep in the wilds of Midian. The Christian term "pastor" is still a favorite term for a minister who, as 1 Pet. 2:25 intimates, looks after those "going astray like sheep" but ultimately returning "unto the Shepherd and Bishop [overseer] of . . . souls."

BETHLEHEM SHEPHERD WAYS TODAY

Interviewing an intelligent shepherd of Bethlehem who still grazes flocks in the fields where the shepherds of the first Christmas Eve were watching, we were told that, especially in spring, Shepherds' Fields below Bethlehem are clothed with nibbling sheep. Flocks are kept clear, however, of that fertile area which is given over to cultivation of olives and vegetables. The shepherds, many of whom live in a small village, Beit Sahûr, on the plain, are Arabs. They have an awareness of following in a great tradition, but we must not poetize them into a reincarnation of the nativity narrative of Luke. They are too prosaic to muse over that sacred record, although many of them are Christians. In winter they take their flocks to warmer fields in Transjordan, Auja, and the Ghor.

Several shepherds combine their privately owned flocks or those for whose care they are hired, so that each man looks after about 100 sheep. Wolves are the greatest present enemy they have to guard against. To do so, they still place their bodies across the doors of caves occasionally, to protect the flocks as in Jesus' day. They still carry their simple food of cheese, olives, bread, or dried figs in their wallets. Sometimes they cook in the open. Some of them are able to return to their village homes at night, having folded their sheep in safe corrals. They do not raise enough sheep for export. On the contrary, they import heavily from Iraq, Nejd, Syria,

Anatolia, and large grazing fields in Trans-jordan.

OTHER ANIMALS OF THE FAMILY

BEES

The sweetmeat-loving casterner has always loved his farm honey, even when extracted from bees that had swarmed in a lion's carcass, as we read in the Samson saga (Judg. 14:8). Evidently the author of Deuteronomy had been chased by bees and was stung, for he referred to the hill-dwelling Amorites chasing Israel "as bees do" (Deut. 1:44). So, too, the Psalmist, who said that enemy nations swarmed about him like bees (Ps. 118:12). Could the "hornet" of Josh. 24:12 have been the conqueror Tuthmosis III of Egypt?

Palestine farmers in ancient times raised black-banded bees and profited by exporting honey to Tyre, which relished this condiment and also the "pannag" confection mentioned by Ezekiel (27:17).

Grace Crowfoot in her book, *From Cedar to Hyssop*, tells of one modern apiary which provides a comfortable living from bees grown near Bethlehem.

BIRDS

See Ornithology.

DOGS

Dogs are thought to have been domesticated in Palestine 8,000 years ago. We meet two sorts of dog in the Bible. First, the snarly, wolfish, tawny-colored, short-haired dog guarding a tent or a house, barking fiercely at every stranger—a familiar scene today in Tekoa Desert. He eats garbage tossed out into streets, or dung piles, and, as Ps. 59:6 says, returns at evening howling about the city. Sometimes the family's dog is allowed to sit under the table to await scraps—a custom referred to by the Canaanite woman who came pleading for Jesus to give a few crumbs from his ministry to her child, as crumbs are given to the dog (Matt. 15:27).

The other type of canine we meet in

Scripture is the shepherd dog which, in olden times more than now, went out with the shepherd to round up stragglers and keep them from precipices. Job refers to "the dogs of my flock" (30:1). Shepherd dogs were generally imported. During the winter they were penned up in the home, and when the flocks went forth in spring, the dogs were keen to attend the grazing, barking to one another across the fields at night and warding off prowling jackals and wolves.

The biblical connotation of dogs is rather on the scavenger side. They were so much of "an abomination unto Jehovah" that none of the pittance they earned was brought as a gift to God (Deut. 23:18). To call an individual a "dog" was one of the most despicable imprecations. Dogs licked the blood of war and murder victims, such as Naboth (I Kings 21:19) and Jezebel (II Kings 9:36). To have dogs lick one's sores as they licked those of the beggar Lazarus was the last depth of degradation (Luke 16:21).

The tendency of dogs to snoop into whatever is going on is graphically shown by their footprints in early Babylonian bricks we have seen in the University Museum at Philadelphia. Before these ancient bricks had dried in the sun, the dogs had walked on them.

Dogs are carved on very early cylinder-seals from Tepe Gawra, but these are the popular *salugi* or greyhound type not really classified as a dog. The *salugi*, dating in Assyria from 4000-3000 B.C., was kept in the home, was comfortably "attired," and accompanied his master. This was true also in Egypt, where the dog was called "man's oldest friend," waiting beneath his owner's chair to go inspecting the fields, the output of bricks, and harvesting of crops. Egypt imported fine hounds from Punt, and at El-Amarna built large kennels for royal establishments which featured hunting. Dogs received elaborate burial as a reward for their faithfulness.

To this day in the Arab world a man is highly offended if a visitor brings a dog into his home. For this reason, orders were issued to American soldiers in the Middle East never to commit this breach of etiquette. (See, also, Jackal, p. 40.)

Jesus taught his followers not to "give

that which is holy to the dogs" and not to cast pearls of truth before unappreciative swine (Matt. 7:6). Paul, in his letter to the Philippians, uses a phrase we have seen pictured in black and white mosaics in a vestibule floor at Italian Pompeii. Perhaps in Roman villas Paul had seen these very words. *Cave Canem*, "Beware the dog [evildoer]."

FISH

See Fishermen, under Professions and Trades, p. 346.

HORSES

Gordon Childc believes that the horse was roaming wild in Palestine in Natufian times, that is, about 10,000 years ago. As a tamed animal, he played for thousands of years a warlike role, drawing chariots of successive conquerors. The general who had the largest number of horses and chariots on his side came out victorious. Chariots were the tanks of early armaments.

According to J. M. Breasted, the horse was first domesticated near the bend of the Euphrates River where it crosses the arch of the Fertile Crescent between Assyria and the Syrian coast. There the fierce equestrian Mitanni people, who may have known earlier domestic horses in the Indus Valley, bred steeds which enabled them to dominate their neighbors. Into what we now know as Russian Armenia south of the Caucasus and into Turkish Anatolia the horse-importers spread, overcoming the Hittites. For even in the great pyramid-building age (c.2800-2250 B.C.) Egyptians did not know the horse as a dray animal. Their wall paintings of that era show legions of little donkeys bearing the freight loads.

Bayard Dodge, President of Beirut University, believes that the Persians secured their first horses from the Cassite tribes who came down from mountains of what we now call Iran into the plains of Persia in the eighteenth century B.C. Horses at that time were plentiful in Europe and in central Asia, whence the Cassites secured theirs. Dodge believes that the Hyksos, who had plenty of camels

even before they acquired their favorite steeds, borrowed cavalry from the Cassites ruling east of their own Hyksos realm in Syria. The Hyksos invaders of Egypt during the Fifteenth and Sixteenth dynasties benefited their enslaved subjects by teaching them the use of the horse. Hyksos ruled Egypt from their capital at Avaris during the Israelites' sojourn in the Delta. Hence we understand the flare of the Hebrew author of the Joseph narrative in Genesis for emphasizing the chariot in which the Jewish "prime minister" rode.

The domination of Egypt by Hyksos horsemen from Asia Minor brought more war cavalry into the Delta than ever before; and for the 175 years of Hyksos domination of Egypt horses played a heavy role. They were retained as innovations of the New Kingdom. The first biblical mention of chariots is in the Genesis story of Joseph (41:43). Chariots in Egypt were still enough of a novelty to be stressed in the Exodus narrative of the pursuit of the departing Israelites from their unhappy captivity in the Delta "concentration camps." And when Judah was attempting to subdue a homeland in southern Palestine, his tribesmen were hampered by "chariots of iron" (perhaps iron-tired chariots) owned by the plain dwellers here (Judg. 1:19).

Early Egyptians did not like to ride horses. Grooms rode horseback returning chariot steeds to stables. The earliest known horseback-rider in art is on a seal recovered from Susa (Shushan of Scripture), ancient capital of Elam. But Breasted, in *Ancient Times*, calls our attention to a discovery made by the French digging at Susa, on which heads of horses were scratched as if to list a man's possessions, as early as 3000 B.C.—1,000 years before the horse was tamed in the Caucasus.

See in picture 108 of matter, from Babylonian Ur, a chariot of about 3000 B.C. drawn by what may be horses, possibly wild asses. This is one of the earliest portrayals of a two-wheeled chariot. The picture also shows a treasured relief now in the University Museum of Philadelphia.

Henri Frankfort, in his *Archaeology and the Sumerian Problem*, expresses his belief

that the horse, with a mane identifying it as such, was used in very early Susa I period in the Tigris-Euphrates Valley, actually in the al-Ubaid or Flood-level era; and that horses continued to be used up to the early dynastic period (c.3000 B.C.), when they appear in art portrayals, hitched in pairs drawing plows and chariots.

The finest picture of a horse in Scripture and in all ancient literature is in Job 39, where the writer describes a horse's neck, clothed "with the quivering mane" as he paws the valley, leaping "as a locust," mocking fear as he prances out to "meet the armed men," swallowing the very ground with his fierce battle lust as he smells the fight from afar, hears the thunder of the captains, and longs to get into the shouting and rattling of swords.

Horses, of course, were plentiful in the Palestine of Paul's time, when an escort of Roman centurions and seventy horsemen led him as far as Antipatris en route to Caesarea by the Sea.

The horse in Bible narratives is synonymous with war. King David, who had encountered Philistine cavalry in the Plain of Philistia, is given credit for introducing war horses and chariots into Palestine. Philistines were accustomed to bringing 600 horsemen against Israel. In another war, as David fought toward the Euphrates, he used sabotage by hocking into lameness, as Joshua had done at Hazor, all but 100 horses out of 1,000 he captured from the "king of Zobah" (I Chron. 18:4). Solomon, son of David, built up an enormous trade, transshipping horses from the north to Egypt and forwarding cedar wood to the Delta for chariots and mummy cases. He also imported from Egypt horses for his own chariot cities, such as Megiddo, on its elevation above the Plain of Esdraelon, battleground of the ages. There we have seen actual stone mangers, hitching posts, stalls, remnants of stables once occupied by his 1,400 horses—and portions of the governor's residence in this strategic pass which held a pincer-grip on trade and warfare between Galilee and the road to Egypt. Breasted and his colleagues of the Oriental Institute have done a superb job of excavating Megiddo, records of which are

available in public libraries. See our picture 21, of Megiddo manger and hitching post.

Albright, in *Archaeology and the Religion of Early Israel*, attributes great importance to the horse and chariot in the developing civilization of Hebrew people living in c.973-933 B.C. The record of I Kings 10 makes the story graphic: "the horses which Solomon had were brought up out of Egypt; and the king's merchants received them in droves, each drove at a price. And a chariot came up and went out of Egypt for six hundred shekels of silver, and a horse for a hundred and fifty."

Yet cavalry was not introduced into Syria and Palestine, states Albright in a note (p. 213) to *Archaeology and the Religion of Israel*, until the ninth century B.C. according to present evidence. He believes it was introduced from Indo-European territory (the home of Medes, Cimmerians, etc.) into Assyria, where, by the twelfth century, cavalry was used in battle. Finds at Gozan (Tell Halaf) in northern Mesopotamia indicate that Nebuchadnezzar used armed horsemen in the sixth century B.C.

In Palestine, horses and chariots were used for hunting and other purposes than war. They "brought him upon horses," to be buried at Jerusalem, was the final record of King Amaziah, slain by conspirators at Lachish, the southern-border-fortress of Judaea. Here, almost 3,000 years later, other conspirators treacherously slew the great British archaeologist, J. L. Starkey, who was trying to unriddle the historic rubble of Lachish mound.

One of the proud moments in Israel's discouraging record of invasions by Syrian hosts is the victory over Benhadad by Ahab of Samaria, whose young men forced the haughty king to escape "on a horse with horsemen. And the king of Israel went out, and smote the horses and chariots" (I Kings 20:20, 21). All through the books of Kings and Chronicles horse narratives are plentiful. An example is the occasion when Rabshakeh tried to bribe Hezekiah's people at Jerusalem to side with Sennacherib against the "bruised reed," Egypt, saying, "I will give thee two thousand horses, if thou be able to set riders upon them" (II Kings 18:23).



14. Camel aiding a Syrian farmer by pumping water to irrigate his fields.

15. Buffaloes, draught animals of great strength, among date palms and ruins of Memphis, Old Kingdom capital of Egypt.





16. Syrian shepherd leading his flock of fat-tailed sheep (Ps. 23:2, 4).

17. Mummified bull, illustrating the veneration of Egyptians for this sacred animal. (Brooklyn Museum)





18. "As a sheep that before its shearers is dumb"
(Isa. 53:7). (Matson Photo Service, Jerusalem)



19. A ram in the thickets of the Jordan Valley.

20. Marble balustrade, probably from the Rostra in Roman Forum, showing animals sacrificed in the *Suovetaurilia*, an agricultural ceremony for purifying fields by driving boar, ram, and bull over the ground three times before slaying them.



Hebrews evidently acquired large numbers of animals during their captivity. We read in Nehemiah's tabulation that they brought back to Jerusalem more than 700 horses, besides mules, camels, and asses. The first place given to the horses suggests a typical Babylonian appreciation of this animal. There was a Horse Gate in the walls of Jerusalem, repaired by priests under Nehemiah after the return from Babylon. The Horse Gate led to the palace, in the vicinity of the Temple.

The horse was late getting to islands of the eastern Mediterranean, as suggested by a badly drawn Late Minoan I or II seal. It shows a horse being shipped to Crete—a curious little picture, with huge horse and small boat to indicate the importance of the cargo from the Near East.

Just as Iran today furnishes some of the world's finest horses, so in ancient Assyria we find art-evidences of a great love of horses and of ability to portray them champing at the bit. Veins standing out on temples as masters ride to the hunt in chariots and draw the royal bow taut. Great sculptors of Nineveh have left us finely wrought Assyrian horses, as the Assurbanipal reliefs in the Louvre. Gems of horse depiction from Khorsabad are built up on millenniums of Babylonian skill in animal carving on tiny cylinder-seals from 3000 B.C. on. René Grousset calls the Assyrians, who were the chief dread of Israel, "the greatest animal sculptors of the ancient world." Persians taught three skills to posterity: riding horses, shooting with the bow, and telling the truth.

During World War II modern Palestine bred army horses in long-unused acres of sandy soil, converted into grassy pasture land, by the planting of trees and erection of water tanks. The village of Keren Hayesod is an example of such a breeding place. Eastern Palestine breeds many horses today. Nelson Glueck, archaeologist, tells us that a first-rate mare, sure-footed for the old highlands, sells for about \$800, with a clause stipulating that every foal go back to the original owner.

PESTS

Farm families in Bible times were as much annoyed by troublesome pests as

landsmen are today. These included flies, evoked in unusually large numbers in dirty Egyptian settlements, as a force to "let the Hebrews go." The account of Ex. 8:20-24 fits in well with still existing unsanitary conditions in the rural mud-villages, where Moslem parents hesitate to drive away infectious flies from even the eyelids of their children. Frogs, called up by the apparent magic of Jehovah from the muddy Nile, so that they overran people's homes, jumping into their beds, their ovens and their kneading troughs, are a vivid detail of this same Egyptian Bible saga of the oppressed Hebrews. Even more destructive was the pest of the locust, always dreaded by dwellers along the Mediterranean and still a menace which recurs in Palestine and Egypt about every decade. The plague vividly described by the prophet Joel produced a national panic of "horse-headed" insects (Joel 2:4). The dread which Palestinians felt for locusts and caterpillars consuming their crops is indicated by the inclusion in Solomon's prayer of dedication at the new Temple in Jerusalem, of a paragraph asking Jehovah to hear the people's prayers in time of locust invasion. (See also Agriculture, p. 20.) Moths, too, are as ancient a pest as the very civilization of Bible lands is ancient. Sometimes these are translated as caterpillars (Isa. 33:4). Job, in a particularly despondent moment, likened himself to a rotten garment, consumed by moths (13:28); and, again, he compared the house built by a wicked rich man, to the frail home of the moth (27:18). The Psalmist saw the comeliness of people fade away as the perishable moth crumbles (Ps. 39:11). Isaiah well knew the appetite moths had for old wool garments (50:9); possibly this prophet's robes were much moth-eaten. Jesus had often watched Mary at Nazareth expose the family's hand-woven garments to the fortifying sun. His words recorded by Matthew (6:19) may be autobiographical: "Lay not up for yourselves treasures upon the earth, where moths and rust consume." Clothing and farm implements were men's chief assets, and damage to them was serious. Rodents and field mice, which ate army supplies, were also pests.

WILD ANIMALS

When the terse narrative of Mark tells us that Jesus for forty days "was with the wild beasts" during his wilderness temptation, he gives us a clue to wild-animal life present in Bible lands through thousands of years. The rugged, forbidding highland character of much of Palestine and Transjordan was more fit for wild beasts than for farming until at last it was tamed by Canaanite and Hebrew. Scripture pages are full of references to wild animals. Let us look at this roster.

WILD ASSES

Mentioned more often than any other animal of the rugged areas is the wild ass. Jeremiah vividly describes them as accustomed to the wilderness, snuffing up the wind. Hosca called Israel of the eighth century B.C. "a wild ass all alone by himself." The book of Daniel referred to the deposed Nebuchadnezzar as "dwelling with the wild asses."

René Grousset, in *The Civilizations of the Near and Middle East*, stresses the noted bas-reliefs of Assurbanipal hunting wild asses and sending them headlong in rout, piercing some by arrows so that they stagger to the ground, spurring his dogs on to bite the legs of others. The weaker asses run for their lives, and colts, innocent of their danger, kick up their heels—all this graceful, rapid motion picture in the hard, cold medium of Assyrian highland stone.

FOXES AND JACKALS

Foxes were familiar to Bible people, and numerous, as suggested by the story of Samson, who caught 500 and tied firebrands to their tails, sending them into harvest fields of Philistine enemies. Possibly these "foxes" were wolflike jackals, members of the dog family *Canis aureus*, of which there are still many in the land. They are a bane to farmers, who erect whitewashed piles of stones in fields for "jackal-scares," as American farmers set up scarecrows. Even near towns as large as Nazareth we have lately heard jackals hideously laughing in the night. Jesus

referred to foxes as having holes for their homes, even though he had no place to lay his head. Perhaps this allusion and also his reference to Herod as "that fox" (Luke 13:32) were suggested by memories of his boyhood at Nazareth (Luke 9:58). In Egypt the jackal or fox was a sacred animal, its likeness being used commonly as an amulet. The jackal-headed god, Anubis, is associated with Osiris, god of the dead and the underworld.

GAZELLES

Gazelles—Small, graceful, soft-eyed antelopes (illus. 69)—and wild roe delighted the eye of mountain-dwelling prophets like Samuel, who refers to their dainty light-footedness on the high places (II Sam. 2:18). The Psalmist's hart panting for the water-brooks as his heart longed for God reflects many a beautiful scene observed by shepherds as they watered their flocks. Among the "clean" animals listed by the codifier of the old Hebrew law as suitable for food are the "hart, and the gazelle, and the roebuck, and the wild goat, and the pygarg, and the antelope, and the chamois" (Deut. 14:4, 5), all of which have cloven hoofs and chew the cud—essential qualifications for "cleanness."

Of gazelles, Egyptians living c. 1375 B.C. made family pacts, carving their likenesses in painted ivory statuettes surrounded by greenery, as we see in the Metropolitan Museum of Art. They prized monkeys and sometimes embalmed and buried them. Apes were sacred to Thot, god of writing.

WILD GOATS

On high cliffs wild goats marked the lairs sought by fugitives like young David, waging guerrilla warfare against Saul in the Wilderness of Engedi. The charm of lovely little wild goats, "dancing" on abandoned palace floors of lost cities, stirred the fancy of writers like Isaiah and Job. Wild goats, or Sinaitic ibexes, appear on marvelous prehistoric rock-carvings recently seen and described by Nelson Glueck, exploring at Kilwan, in a remote tip of the north Arabian Desert. He reveals how sensitive to the loveliness of

this delicate animal, with its wide-curving, knotted horns, were people who drew its grace on rocks some 10,000 years ago in a center where men depended on the hunt for their food. These rock-drawings in the Nubian sandstone hill, where caravan routes moved to desert oases, were known to early Christian hermits worshipping God on this lonely site. They prove the surprising skill of prehistoric artists who portrayed "the full beauty of the delicate animal." Says Glueck in *The Other Side of Jordan*: "... two ibexes, superimposed on another drawing of an ox, showing nostrils, neckline, and horns rising and sweeping back gracefully from the head, then curving and tapering to sharp points touching the back; the foreleg in movement—all these features are bound together in a delicate yet strongly portrayed whole, which gives the rock-drawing a vibrant reality, rather strange, in view of the thousands of years which have elapsed since it was first executed"—in the Natufian era of the Mesolithic Period.

RABBITS

The rabbit, or coney, and the hare were dainty wild animals but were declared unfit for food because they chew cud and "do not part the hoof"—an odd prohibition by ancient Hebrew lawgivers. The author of Proverbs calls conies "a feeble folk," which, nevertheless, "make their houses in the rocks" (30:26).

MISCELLANEOUS WILD ANIMALS

If you are interested further in wild animals of the Bible, look up also the leopard (possibly the swift Assyrian chectah), the bear (probably the European brown bear), and the serpent. The latter played an inconsistent role. In Babylonia and other lands honoring earth-goddesses, it was revered. In Crete, as well as in Italian towns such as first-century Pompeii, the serpent was a beneficent spirit looking after the household. In Pompeian kitchens and rooms where the family gods were honored in little niches, we have seen places reserved for snakes who came out to eat fresh eggs. Greeks made the serpent a symbol of Aesculapius, god of medicine, whose emblem physicians still use. But

Hebrews regarded the serpent, or snake, of which there are some thirty varieties in Palestine, as "subtle," poisonous, unclean. John the Baptist called Pharisees "offspring of vipers" (Matt. 3:7). Yet snake-wisdom was so proverbial that Jesus instructed his disciples to be "wise as serpents" (Matt. 10:16). The story of Aaron's priestly rod turning into a serpent before the eyes of Pharaoh, to terrorize him into permitting the departure of Israel from Egypt, is one of the great serpent stories of the Bible.

When the Israelites of Hezekiah's time worshiped the "brazen serpent" that Moses had made, they were reminiscent of this incident and were also doing obeisance "just in case" to a feared foe. Also, they probably felt the infiltration of serpent worship from Phoenicians and Babylonians who gave this animal a place in their Asherah cult houses (illus. 238).

Various semidomesticated animals, such as antelopes and hyenas, are depicted eating from mangers in stalls along with cattle in a relief of walls of the tomb of Mereruka at Egyptian Saqqarah of the twenty-seventh century B.C. A picture of this remarkable panel of stalled animals has been published by the Oriental Institute in the Saqqarah Series. The delicate horns of the antelopes and the characteristic prowling pose of the hyenas are admirably done.

BIG GAME IN BIBLE LANDS

Elephants appear to have been early on the hunters' list in Egypt, for the appearance of ivory fans and ivory-inlaid furniture and accessories indicates a local source. Elephants are seen in mosaics of the trading center at Ostia, port of Rome. They were prized for their ivory-yielding tusks, employed in the fine arts, for carved bronze mirror handles, cult figurines, cylinder-seals, jewel and cosmetic boxes, spinning whorls and distaff heads, and inlaid gaming-boards found all over the Mediterranean world. Ivory combs were common.

Lions stalk through Bible narratives as "judgments" on people at Samaria who "know not the law of the god of the land" (II Kings 17:26). Yet lions were pets at such luxurious courts as Solomon's and the Egyptian Pharaohs'. And in As-

syrian bas-reliefs they are chiseled with superb grace and strength, symbolizing the massive strength of the Assyrian Empire.

Crouching lions, lions that roar and tear people apart, lions lurking in snow pits, lions that break men's bones with sharp teeth, young lions that rend flocks—these range from Genesis through Revelation with terrifying effect. Yet Isaiah offsets all the lion's bestiality in his wonderful prophecy of the era of peace, when "the calf and the young lion shall [lie down together] . . . and a little child shall lead them . . . and the lion shall eat straw like the ox" (Isa. 11:6, 7).

Besides the lion, nature-loving Egyptians, armed with boomerangs and spears, also hunted wild cattle, wild boars, wolves, hyenas, porcupines, jackals, mountain goats, and hippopotami, which flourished in marshy swamps from 2000 B.C. on. Isaiah gives the data that wild antelopes were caught in huge nets (51:20).

For the enigmatic monsters of the deep vividly described by Job as "leviathan" and "behemoth" our best pictures come from the mind of William Blake, reacting to the powerful chapters 40 and 41, depicting monstrous hippopotami lying "under the lotus trees, in the covert of the reed, near willows" of a brook whose overflowing does not annoy. Possibly the leviathan is a huge variety of Nile crocodile, which cannot, says Job, be drawn out with a fishhook, or have his jaw pierced with a spike, or allow his "strong scales" to be separated, for they are "shut up together as with a close seal," so tightly that no air can get between them. Job's words, describing the leviathan's eyes as "red as the morning" and his breath "as coals," leave no doubt in the reader's mind that he is talking about the crocodile, sacred to Egyptians. Many crocodiles live to a great old age.

A BIBLICAL WALPURGISNACHT

One of the favorite vehicles used by Hebrew prophets to convey God's awesome doom on wicked cities was a picture of once-royal rooms inhabited by "doleful creatures," such as the porcupine, the owl, and the raven, with wolves crying in castles "and jackals in their pleasant

palaces" (Isa. 13:22). Isaiah couched the doom of ancient civilizations in terms of untenanted palaces filled with thorns and nettles, fortresses that were habitations of jackals, "a court for ostriches," a rendezvous of wolves and other "howling creatures" and "night monsters, kites and dart-snakes." His consummate description of "terror that stalks by night" is unequaled even by Edgar Allan Poe's "Haunted House" or modern mystery stories.

ANIMALS IN ART AND WORSHIP

BABYLONIA

It was inevitable that the fondness of early dwellers in Bible lands for animals should play a prominent part in both their art and their worship. Much of their art was sacred. Of course, sheer fantasy sometimes dictated designs, as in the case of the delightful little donkey gracing the end of the chariot pole in Queen Shub-ad's Sumerian equipage of the late fourth millennium B.C. Animal motifs play a larger role in Sumerian religious art than any other design. This fact is evidenced by the famous animal orchestra inlaid on the harps excavated from the tomb of a king at Ur (illus. 174), by designs on the Sumerian gaming-board (illus. 221), and by many a frieze of excavated temples. The famous milking scene from the Anni-Padda's Temple at 'al-Ubaid shows an ancient Babylonian ritual. Milkers are seated behind the animals in a shed of wattled mud; farm helpers are carting away jars of warm milk; others lead cows in to be milked, with as much "organization" as the Borden "Rotolactor" exhibit at the New York World's Fair. They make up a charming scene from animal husbandry in early Babylonia. Another famous evidence of animals in art among ancient Babylonians is the marvelous bowl carved with skillfully executed, massive heads of bulls among sheaves of perfect wheat. This bowl, dating from possibly the third millennium B.C., now in the British Museum, is a wonderful portrayal of ancient honor paid to sources of life. The amazingly well-carved animals enlivening

Babylonian cylinder-seals (illus. 80) show us how deftly ancient artists carved intaglios of gazelles, goats, bears, and lions with very primitive chisels. Some of these animal seals may have documented the sale of sheep, cattle, and pigs to temples for sacrifice in Sumeria. Such a one is in the authors' collection.

Sometimes the only clue we get to the varieties of animals in proto-Sumerian times is the dung surviving in mud plaster of ancient homes. Thus we know they had cattle, sheep, pigs, as suggested by Gordon Childe in *New Light on The Most Ancient East*. A bas-relief showing four-wheeled chariots indicates that very early Sumerians of Mesopotamia had at least mules, if not horses.

CANAAN

We need only read translations of the famous Ugarit tablets found at Ras Shamra in northern Syria to discover the part played by animals here in rituals of worship—rituals which exerted a profound influence upon rites of early Israel.

Albright cites sacrifice of the ass in worship by Amorites in the eighteenth century B.C., even as non-Christian Arabs of Byzantine centuries sacrificed the camel.

EGYPT

Egypt balances up the Babylonian love of animals we have found at the eastern end of the Fertile Crescent. As far back as excavated material goes, we find people, even in predynastic times (i.e., before 3200 B.C.), wearing faience beads strung together with small animal amulets, mere recital of which sounds like a catalogue of a zoo: lizards, crocodiles, hawks, cats, falcons, frogs, flies, bulls' heads, baboons, snakes, scorpions, frogs. The University Museum at Philadelphia has a fine procession of these in its cases.

Egyptians embodied Horus, a member of their chief triad of deity, as a hawk-god (illus. 150). The goddess Hathor was cow-headed.

The spiritual young Akhenaton had at his El-Amarna palace a zoological garden unique in the ancient world. It lives on

in the Gezira Gardens near Cairo today.

From the Bible itself, as well as from ancient Egyptian art, we know the prevalence of bulls in art, not only in connection with the vast Serapium for worship of sacred mummified bulls at Saqqarah, but also in their influence upon sacred Hebrew art:

They [Israel] made a calf in Horeb,
And worshipped a molten image.
Thus they changed their glory
For the likeness of an ox that eateth grass.
—Ps. 106:19, 20

But as late as the time of Jeroboam another calf was set up and worshiped by the Jews who had revolted against the succession of Solomon's son and the true God of their fathers (I Kings 12:28).

For Cretan bull-worship and bulls in art see illus. 20. The bull signified strength. It was elaborately sacrificed in the Greek colony of Syracuse in Sicily, whose altars were famous. The bull figured, too, in Mithraic worship, popular across the whole width of the Mediterranean. An ancient bas-relief in Naples Museum shows Mithras himself, in a pointed, Punchlike Phrygian cap, slaying an agonized bull. The sun and moon look benignantly from above, and Hesperus, the pipe-playing evening star, and the torch-bearing Lucifer, the morning star, witness the act.

One of the most famous depictions of the giant bull in ancient art is the Farnese Bull, once in the National Museum at Naples. It shows two sons, Amphion and Zethos, tying to a raving bull the woman Dirce, who had in jealous anger against their mother Antiope sent her to prison on Mount Cithaeron, lest her offspring soon to be born be hostile to Dirce. The family dog looks on in astonishment. The mother Antiope lingers behind the bull, entreating mercy for her enemy.

In connection with funeral rites, Egyptians prepared *canopic jars* of alabaster or marble to contain human entrails. These had lids carved in the shape of the ox, eagle, owl, or jackal with whom custodianship of the particular organ was associated. Several of the jars are in the University Museum at Philadelphia. Animal shapes were also used in the palettes on which

predynastic Egypt of c.3200 B.C. ground its cosmetics. Some of these—ducks, turtles, flounders, sunfish—we see today in this same museum. In Badarian Egypt, where earliest agriculture was practiced, dogs were sometimes buried with their owners, even as horses and chariots were immured in the royal tombs at Sumerian Ur.

First Dynasty Egyptians honored animals sufficiently to carve them on tombs, to erect a tomb for three favorite asses on a platform in a courtyard, and to bury ducks in a tomb large enough for a human being.

Later Egyptians mummified animals as they did human bodies. The University Museum at Philadelphia shows mummies of cats, falcons, crocodiles, ibexes, and lizards. Illustration 17 shows a mummified Egyptian bull.

The first nome of upper Egypt placed on its heraldic coats of arms an elephant accompanied by native animals.

PALESTINE AND SYRIA

From the very beginning of Hebrew worship, animals played an important part. As early as patriarchal times the representative male was used in sacrifice and the female, reserved for breeding. The ram which became providentially caught in a thicket by its curving horns (illus. 19) was substituted as a burnt-offering by Abraham just as the Patriarch was about to offer his own son Isaac, as the lamb demanded by God (Gen. 22:2, 13).

Moses, who as a shepherd had served in the wilderness grazing grounds of his father-in-law, Jethro the Midianite, taught his flock of human sheep coming up from Egypt that they were never to work the male firstling of their herd and flock, but should bring them as a thank-offering to Jehovah: "Thou shalt eat it before Jehovah thy God year by year in the place which Jehovah shall choose, thou and thy household. And if it have any blemish, as if it be lame or blind . . . thou shalt not sacrifice it unto Jehovah thy God. . . . Only thou shalt not eat the blood thereof; thou shalt pour it out upon the ground as water" (Deut. 15:19-23).

This ritual was to take place within the gates of the worshiper's settlement. It became a natural ceremonial in consequence of the first Passover. Here, always, the lamb from either the sheep or the goats was to be without blemish: "Eat not of it raw, nor boiled at all with water, but roast with fire; its head with its legs and with the inwards thereof" (Ex. 12:9). And "let nothing remain of it until morning." Jesus observed the Passover every spring, as righteous Jews do today. To his friends he said, "With desire I have desired to eat this passover with you before I suffer" (Luke 22:15). By his sacrifice of self upon the cross, Christ became our Passover, as Paul once wrote to Christians at Corinth.

The curving horns of rams made trumpets (*shofars*) calling worshipers to the Temple (illus. 175 and 19).

The greater the national prosperity, the larger the number of animals employed for the sacrifice on the altar at Jerusalem. This altar, which had been the threshing-floor of Ornan the Jebusite in the time of David, was a rock having great holes down which the blood of sacrificed animals flowed to the Kidron Valley. This rock is enclosed today by the Dome of the Rock in the old Temple Area (illus. 235). Even rulers who lived as early as Gudea of Lagash, felt the nauseating waste of such procedure and tried to reform the ritual. It remained for a prophet of Israel many centuries later to teach: "Will Jehovah be pleased with thousands of rams, or with tens of thousands of rivers of oil? . . . what doth Jehovah require of thee, but to do justly, and to love kindness, and to walk humbly with thy God?" (Mic. 6:8).

GREECE AND ROME

Greek love of animals is best exemplified by the remarkable silver coins for which they were famous in ancient times. The owl ornamented the silver pieces of Athens, as the curly-winged horse Pegasus did the drachmas of Corinth in the sixth century B.C. At Cumae, a Greek colony in Italy, a *human-headed bull* was coined in 423 B.C. Colonia struck an *antlered stag* on her coins of 480-388 B.C. Kroton featured the *eagle*. The *bee* was stamped on a money of Ephesus in 387

B.C., and coiled *serpents* circulated here in the first century B.C. It is notable that Greek islands struck designs featuring sea life. Sicily minted sea crabs at Akragas and dolphins at Messina, and as early as 700 B.C. the Aegean island of Aegina used sea turtles on her coins. Other cities of Sicily stamped their coins with a man-headed bull, honoring the river-god Gelas; Himera used walking cocks and hens before 489 B.C. Sicilian Syracuse coined designs of four dolphins and of a lion under a horse-drawn chariot, symbolizing the defeat of African Carthage. The bearded, lying goat appears on coins of Aigai in Achaia (431-371 B.C.); the flying dove, on excellent ones made at Sikyon in the fourth century B.C. Fascinating money from the great Phoenician port of Byblos, on the coast of present-day Lebanon, shows a galley with a lion's head at its prow and a sea horse fittingly placed below the galley. The Phoenician merchants were certainly the sea horses peddling the wares of the eastern seaboard of the Mediterranean to their neighbors south and west.

We find no such depiction of animal life on coins of Jews, to whom such artistry would be making of graven images.

Greeks honored the serpent as the wisest of animals. They gave him to Mercury as a symbol and to Aesculapius. The horse they honored as the gift of Neptune, whose foamy-maned pairs drove him triumphantly among their lovely Aegean islands. In the fifth century B.C. their sculptors made superb carvings of horses. A glorious Roman depiction of Neptune's horses is preserved in its original site at Ostia, port of the capital, in black-and-white floor mosaics of the old Chamber of Commerce.

Romans on their altars sacrificed pigs, cattle, and sheep, all wearing wreaths of honor, as we see in the picture of these animals carved on an altar in the Roman Forum, illus. 20.

Romans prized animals as pets, received from ambassadors of conquered countries. Venomous snakes came from India. Probably the earliest tiger seen in Rome was a gift to Caesar Augustus, who ruled at the time of Christ's birth, from an Indian king, exhibited, like the rhinoceros, as

"something new" from Ethiopia. Even elephants appeared in the gladiatorial shows, along with trained bulls and horses. When temples were dedicated at Rome, holocausts of animals occurred. In amphitheatres known to the world of Paul's day cages of lions were stored underground, ready for their onslaught of human victims, as we know from the martyr annals of earliest Christians. We have seen their underground cells at Italian Puteoli, (illus. 219). Even into Roman Arles in France bears and other wild animals were shipped for the arena. Every arena fight was preceded by a "circus" procession of animals through the streets. By these Augustus carried popular favor throughout his empire. Even at Jerusalem, Herod set up similar festivals to curry favor with his Jewish subjects, who witnessed them with lukewarm enthusiasm.

Egypt under the Ptolemies staged great animal parades through the streets of Alexandria, where giraffes, ostriches hitched to chariots, wild asses pulling chariots, camels loaded with spices, 2,000 hounds, and cages of beautiful parrots, peacocks, pheasants, and other African birds made the air brilliant with color and cries. The zoo at Alexandria was notable in the second century B.C.

EARLY CHRISTIAN ART

Animals were prominent motifs in early Christian art. The lion denoted Mark; the ox, Luke. Sheep were still prominent, symbolizing the faithful disciples of the good Shepherd, who under guise of a Greek Orpheus with the sweet music from the pipes of his gospel led the flock where he desired.

Dorothy Lathrop and Helen French bring to a beautiful climax their picture book, *Animals of the Bible*, by an illustration based on Isa. 11:4-9. They show a little child seated in joyous fellowship of animals under a group of trees of the Bible—fig, oak, vine—fondling the beard of a kingly lion. A lambkin runs up to join the play, and a little black sheep is cuddled against a leopard amid approving flowers gracing this scene of peace and good will among all God's creatures.

ADDITIONAL BIBLE REFERENCES

"Abraham rose early in the morning, and saddled his ass, and took . . . Isaac his son. . . . And Abraham said unto the young men, Abide ye here with the ass, and I and the lad will . . . worship, and come again unto you." (Gen. 22:3, 6)

"the Lord answered him, and said, Ye hypocrites, doth not each one of you on the sabbath loose his ox or his ass from the stall, and lead him away to watering?" (A better translation of "stall" is "manger.") (Luke 13:15)

"the Midianites' . . . camels were without number, as the sand which is upon the sea-shore for multitude" (Judg. 7:12)

The Gadites and the half-tribe of Manasseh captured from the Hagarites "of their camels fifty thousand" (I Chron. 5:21)

Isaiah spoke of "a troop of camels" or camels drawing chariots (Isa. 21:7)

"Hazeel went to meet him, and took a present with him, even every good thing out of Damascus, forty camels' burden" (II Kings 8:9)

"he sacrificed an ox and a fatling" (II Sam. 6:13)

"Take a heifer with thee, and say, I am come to sacrifice to Jehovah" (I Sam. 16:2-5)

"The ox knoweth his owner" (Isa. 1:3)

"if an ox gore a man or a woman to death, the ox shall be surely stoned, and its flesh shall not be eaten; but the owner . . . shall be quit" (Ex. 21:28)

(But if the ox had been goring people habitually without the owner confining it, the owner, as well as the ox, was to be put to death.)

"Where no oxen are, the crib is clean" (Prov. 14:4)

"Better is a dinner of herbs, where love is,

Than a stalled ox and hatred therewith" (Prov. 15:17)

"the man was very great, and he had three thousand sheep, and a thousand goats; and he was shearing his sheep in Carmel. Now the name of the man was Nabal" (I Sam. 25:2, 3)

"Will I eat the flesh of bulls, Or drink the blood of goats?" (Ps. 50:13)

"Be thou diligent to know the state of thy flocks, . . .

The lambs are for thy clothing,
And the goats are the price of the field;
And there will be goats' milk enough for thy food, for the food of thy household" (Prov. 27:23, 26-7)

"The pastures are clothed with flocks" (Ps. 65:13)

"he led forth his own people like sheep, And guided them in the wilderness like a flock" (Ps. 78:52)

"So we thy people and sheep of thy pasture Will give thee thanks forever" (Ps. 79:13)

"Give ear, O Shepherd of Israel, Thou that leadest Joseph like a flock" (Ps. 80:1)

"we are the people of his pasture, and the sheep of his hand" (Ps. 95:7)

"he suffereth not their cattle to decrease" (Ps. 107:38)

"He shall feed his flock like a shepherd." (Isa. 40:11)

"Israel is a hunted sheep" (Jer. 50:17)

"as the sheep of Bozrah" (Mic. 2:12)

"As sheep having no shepherd" (Matt. 9:36)

"I send you forth as sheep in the midst of wolves" (Matt. 10:16)

"Fear not, little flock" (Luke 12:32)

"Feed my sheep" (John 21:17)	more than thou, thou shalt not be afraid . . . for Jehovah thy God is with thee" (Deut. 20:1)
"the great shepherd of the sheep" (Heb. 13:20)	
"the swine . . . is unclean unto you: of their flesh ye shall not eat" (Deut. 14:8)	"Some trust in chariots, and some in horses; But we will make mention of the name of Jehovah our God" (Ps. 20:7)
"neither cast your pearls before the swine" (Matt. 7:6)	"he took him up to him into the chariot" (II Kings 10:15)
"And they came out and went into the swine" (Matt. 8:32)	
"he sent him into his fields to feed swine" (Luke 15:15)	"Be ye not as the horse, or as the mule . . . Whose trapping must be bit and bridle to hold them in" (Ps. 32:9)
"When thou goest forth to battle . . . and seest horses, and chariots, and a people	"A horse is a vain thing for safety" (Ps. 33:17)

BIBLIOGRAPHY

- Albright, William F., *Archaeology and the Religion of Israel*, The Johns Hopkins Press, Baltimore.
 Albright, William F., *From the Stone Age to Christianity*, The Johns Hopkins Press, Baltimore.
 Borland, Hal, "Animals of the Bible," *Frontiers*, VI, No. 2, December, 1941.
 Breasted, James H., *Ancient Times*, Ginn and Company, New York.
 Childe, V. Gordon, *New Light on the Most Ancient East*, D. Appleton-Century Company, New York.
 Frankfort, Henri, *Archaeology and the Sumerian Problem*, University of Chicago Press, Chicago.
 Grant, Elihu, *The Orient in Bible Times*, J. B. Lippincott Company, Philadelphia.
 Glueck, Nelson, *The Other Side of the Jordan*, American Schools of Oriental Research, New Haven.
 Grousset, René, *The Civilizations of the East (Near and Middle)*, Alfred A. Knopf, New York.
 Jennison, G., *Animals for Show and Pleasure in Ancient Rome*, University Press, Manchester, England.
 Lamsa, George, *Gospel Light*, A. J. Holman, Philadelphia.
 Lathrop, Dorothy P., and French, Helen D., *Animals of the Bible*, Frederick A. Stokes Company, Inc., New York.
 Metropolitan Museum of Art, New York, pamphlet, *Ancient Egyptian Animals*.
 Robinson, George L., *The Twelve Minor Prophets*, Doubleday, Doran & Co., Inc., New York.
 Ward, John, *Greek Coins and Their Parent Cities*, John Murray, London.

SECTION 3

APPAREL

They part my garments among them,
And upon my vesture do they cast lots.

—Ps. 22:18

Introduction

Attitude of Bible People to Their Garments

Jesus' Attitude toward Apparel

Rent Garments

Materials

Skins

Wool and Hair Fabrics

Sheep's Wool, Camel's Hair, Sackcloth,

Goat's Hair

Linen

Cotton

Silk

Mixtures

Checker work and Woven work

Appliqué

Affiliated Clothing Craftsmen

Draper

Dyer

Fuller

Weaver

National Modes

Babylonia, Assyria, and Persia (3000-424
B.C.)

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From 5200 to 1500 B.C.

From 1500 to 1100 B.C.

Graeco-Roman Egyptians

Cosmetics

Greece and Rome

Hittites, Syrians, Elamites, Phoenicians

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Royal Attire

Soldiers' Mail

Additional Bible References

Bibliography

INTRODUCTION

ATTITUDE OF BIBLE PEOPLE TO THEIR GARMENTS

The Bible gives generous details about people's apparel in the centuries covered by its narratives. These are being supplemented every few months by findings like the tablet, or stele, from northern Syria recently identified by Albright as bearing a portrait of the chief Tyrian god, Melcarth, attired in the Syrian loincloth of 850 B.C., when Benhadad I of Damascus erected the stele. Such discoveries give us not only valuable date pegs in near eastern history but details about what people wore in a given era.

It is interesting to place side by side the findings of an archaeologist like Albright, investigating the Syrian Desert, and the

cye-witness account of Syrian Arab attire in modern times as described by Colonel Lawrence in his *Letters*. Albright says that certain Syrian Desert traveling tinkers today are dressed like Amorites of 2000 B.C.—men and women alike, in brilliantly colored striped woolen tunics, walking along beside their transport asses armed with bows, javelins, and stringed lyres. Says Lawrence: the gala dress called "of the seven kings" is made of a tunic of fiery-colored alternating stripes, reaching from neck to ankle, over which a short blue coat, red-lined, is worn; and the inevitable eastern girdle with thirteen tassels in various colors and a head-cloth of silver-and-black woven fabric under black goat's hair rings. To this add a gold-embroidered silk vest, a white under-tunic, and socks of every imaginable tint; and

multiply all this brilliance by ninety-nine; and you have, says Lawrence, a picture of a Syrian Desert group near Carchemish at the head of the Tigris-Euphrates today, where Woolley and Lawrence dug before World War I. Again Lawrence describes his bodyguard of fifty mounted horsemen appointed by King Feisal as "gay as a bed of tulips"—coveted contrast with the drab monotony of the desert-plain of dry thorn and tamarisk trees. The camels are as brilliantly attired, he says, with wool and bead trappings as their riders, who sing lustily as the cavalcade of color moves up a dry stream bed.

The late Sir Flinders Petrie believed that the gaiety and charm of early Amorites set the fashion for high-class Egyptians, who were influenced by the vivacious ways of living of these happy desert people.

Love of bright clothing appears in Scripture as characteristic of folks living in dull backgrounds. James in his epistle refers to a man coming into a synagogue in "gay clothing," goodly apparel, topped off by a handsome ring—in contrast with a man in "vile clothing" (Jas. 2:2, 3, King James Version). The vision which came to Cornelius, the devout Roman centurion of Joppa, was of a man "in bright apparel" (Acts 10:30).

In spite of monotonous standardization of style due to the limited variety of materials, people in Bible lands were much interested in their apparel. A man valued his garments next after the ass which carried him. If he slept in a strange inn on a long journey, he rested fully dressed, not risking robbery even of his shoes by removing them; or of his girdle by laying it aside, for its slit carried his money. In fact, he slept at home with all his garments on. So did his family.

Thirty linen garments and "thirty changes of raiment" were held out as a tempting prize by Samson when he posed his riddle (Judg. 14:12), even as Captain Naaman of the Syrian army offered "two changes of raiment" along with two bags of silver to the greedy servants of Elisha the prophet. The spoil desired by Sisera's mother was dyed garments embroidered on both sides (Judg. 5:30).

Job lamented the "garment that is moth-eaten" (13:28). Another evidence

of the value placed upon all garments by easterners is the gambling for the seamless robe of Christ at the foot of the cross by Roman soldiers who knew the value of its woolen warmth for the bitter cold of Judean nights on guard (John 19:23, 24).

JESUS' ATTITUDE TOWARD APPAREL

Jesus was annoyed at people's fussing about "what they should put on" and what sort of purse they should carry. Next after their food, people's clothes constituted their chief concern. Christ rebuked them with the suggestion that the "body is more than the raiment" (Matt. 6:25); and that even if they should possess the attire of a Solomon, they would look less attractive than the gay flowers of the field (v. 29). Yet Jesus was so much interested in clothing for the poor, that he told his disciples that when they clothed the naked, they were giving him apparel (Matt. 25:36). He rebuked men who had two coats when others had none, and suggested a voluntary rationing (Luke 3:11). He knew that many of his hearers had only one set of clothes, if that, even as the charming little boy of Galilee (illus. 180) wears all his wardrobe all the time. His "tunic" with zipper is just a man's shirt found in the discard somewhere.

Jesus was ever observant of men's attire. In the wedding parable he used harshly the man who came to a feast dressed in his work clothes instead of in his gay festival robe, to describe inappropriate attitudes toward his Kingdom. And he knew how the scribes "desired" to walk in long robes, even as Pharisees "enlarged the borders of their garments" to be more conspicuous in the temple, court, and synagogue (Matt. 23:5).

Clothing suitable to season and occupation was a proof of prosperity. Often people, to impress neighbors, wore several layers when "going to town." The thrifty home-maker described in the last chapter of Proverbs not only made and sold to merchants attractive linen garments and girdles, but she kept her lamp going day and night, spinning and weaving for her own large household. She was not afraid

of the snow, for she had warm scarlet clothing for them stocked in her chest—not to mention the generous goods she allotted to the “needy,” and the tapestry cushions for her home (Prov. 31:1-22). She is matched in New Testament times by Dorcas, who made “coats and garments” for widows and orphans (Acts 9:39).

Even in early Old Testament times, people were garment-conscious. Crafty Rebekah dressed up her younger son Jacob in the “goodly garments” of her elder Esau (Gen. 27:15). Detailed were the ceremonial laws concerning laundering of clothes, even while Israel was trekking across deserts from Egypt to Palestine in a dusty Exodus. When Moses came down from Mount Sinai with a code of conduct for his followers, he told them they were not to proceed until they had washed their garments (Ex. 19:10). A levitical law commanded the washing of one’s clothing after it had touched an unclean animal, such as an owl, raven, pelican, bat, stork, or heron (Lev. 11:13-19).

RENT GARMENTS

In a country where so many people were compelled to wear torn garments we wonder why the custom of rending one’s apparel to show rage, sorrow, or disapproval is so often mentioned in Scripture. Why should people shred apart their most precious possessions? When Ezra heard that the people of Israel who had returned from exile were intermarrying with Canaanites, Hittites, Jebusites, and other neighbors, he tore hairs from his beard, shredded his “garments” and his “robe,” and sat down in deep humiliation at such procedure. His abject sorrow bore fruit, for many who had made such alliances and had children by them agreed to abandon their foreign wives (Ezra 10).

Sometimes mobs, to show disagreement, rent their garments and tossed them into the air, as during the mobbing of Paul in the Jerusalem Temple Court (Acts 22:23). Paul and Barnabas, when offered homage due a god at Lystra, “rent their garments and sprang forth among the multitude” (Acts 14:14). There seems to be no explanation of the habit of rending garments other than passion.

An advance in wisdom came when Joel suggested that people rend their hearts and not their garments, and turn to Jehovah.

MATERIALS

Costumes in Palestine were influenced by the modes of the many neighbors. Influences were always flowing across highland passes and narrow plains. In fact, while authoritative volumes given over to costumes down the centuries often have no distinctively Palestinian section, they do have Babylonian, Egyptian, Greek or Roman sections. We shall consider the influences which filtered into the little land west of the Jordan. But first, let us look at certain fabrics which all near eastern people used in common.

SKINS

Animal skins were the first successors to the mere belts constituting men’s earliest attire—belts to hold their tools. Sheepskins were the most common. Leopard skins were valued and used by Egyptian priests as ceremonial attire. Sealskin or porpoise skin is mentioned by Ezekiel (16:10). Animal tails on kilts in Egypt denoted royalty or priesthood.

WOOL AND HAIR FABRICS

Far older than linen, cotton, or silk is wool. Ancient Greeks in their mountainous country used it in very early times, as we see in statues and in actual shreds found in colonial Greek tombs in the Crimea. Dorian Greeks preferred soft wool for their chitons. But Egyptians considered a man impious if he entered a temple dressed in wool or brought a wool-made gift as an offering. It was hairy, unclean. Arabians grew excellent wool on a large scale and exported it to Tyre, where it was sumptuously dyed.

Babylonians had a traditional fondness for wool garments and made a wide market for their highly colored mantles. Even in late times their kings wore fleece fringes, real or simulated, on the hems of their garments, reminding them of old Sumerian times (illus. 108). There was not a man

in the whole ancient East who did not prize a "Babylonish mantle"—as did Achan the Hebrew who stole one from the spoil of battle in the period of the judges (Josh. 7:21).

In Palestine, wool, home-grown, hand-beaten to rid it of foreign matter, home-combed, homespun, and home-woven on ancient looms, provided everyday garments of prosperous middle-class farmers. Cotton could not grow on Palestinian highlands.

Shoulders of sheep provided the most desirable fibers for spinning. Natural color was popular. White sheep, kept covered from birth to protect their wool from road dust and manure, furnished the snow-white wool prized by wealthy Palestinians. To them, nothing was more delectable than immaculate white wool apparel. No wonder sheep-shearing time was a festival occasion: new garments came in sight for at least some. We can understand why Ezekiel soundly denounced shepherds who killed young fatlings for food and clothed themselves in their skins, instead of raising the sheep for future usefulness (Ezek. 34:1-3).

Pure wool garments were handed down from one generation to another. To prevent moth deterioration was a constant care of good housekeepers—an anxiety for which Christ tried to substitute a concern for "treasures in heaven, where neither moth nor rust doth consume" (Matt. 6:19).

Jesus and his disciples wore wool cloaks. So, too, Paul, as we know from his request to Timothy to bring his cloak to the damp Mamertine Prison in Rome. Possibly Paul had woven that very cloak on his own looms long before, or had received it as a gift when swinging round his circuit in Asia Minor. For the woven goods of Cilicia were famous.

Camel's hair provided the warm though coarse cloth of desert dwellers such as John the Baptist and nomads of our own day. Yet this fabric was also worked up into such gossamer fineness for warm, lightweight top-mantles that it could be gathered up in two hands. We have seen cloaks of this quality at the Arab Industrial Bazaar in Jerusalem, where fifty or sixty dollars was not rated high payment for

delightful *abayehs* of henna, rust-colored, rose-tan, or brown camel's hair.

Sackcloth was a coarse form of dark-brown or black goat's hair or camel's hair, as scratchy as the self-disciplinary hair jackets worn by a Thomas à Becket or a Francis of Assisi. To gird one's stomach or loins with such material was to express regret for personal indiscretion or for national calamity (Ps. 69:11). Isaiah, who at times wore a sackcloth loin piece fastened with a leather girdle and went barefoot in protest against Assyrians (Isa. 20:2), and John the Baptist, similarly attired, hoped by personal example to denounce the soft habits (in two senses of the word) at kings' courts (Matt. 11:8).

Sackcloth was made also of coarse flax or hemp thread.

Goat's-hair cloth, brown, black, or striped, was favored for durable tent cloth or poor men's mantles.

LINEN

Although papyrus and even almond stalks were used for coarse cloth in Egypt, flax was staple. H. F. Lutz, in *Textiles and Costumes*, gives a clear description of the flax sown in Egypt in November; pulled 110 days later; separated from its seed capsules; bundled, retted, exposed to sun, and covered with water for ten days to bleach and soften it for crushing. A wooden mallet was used to separate the flax fibers from the woody parts; and a comb, such as wool-carders still use, was employed to draw it into thread for weaving on the hand looms. Egypt has been given credit for spinning the finest linen. Herodotus mentions four qualities, one so fine that each thread contains 360 fibers. Hebrews made not only the coarser grades for poor men's wear, but such fine qualities that even Egypt imported from them for their linen tunics and loincloths.

From the story of Rahab of Jericho, drying flax on her roof-top, we know that before the Hebrew occupation the warm Jericho Plain favored flax. Flax flowers, dainty with delicate pinks, color the spring landscapes of Palestine, Syria, and Asia Minor today. Greeks of Ionia preferred linen for their chitons. Mainland Greeks imported their linen from Colchis on the

Black Sea and Egypt. From Egypt Solomon imported linen yarn "at a price" (II Chron. 1:16, King James Version).

In Palestine, linen was used for priestly garments, turbans, veils, and undergarments (Ex. 39:28, 29). The child Samuel's ephod was lincn. So, too, King David's hangings of the Tabernacle and the veil of the Temple were linen. Of linen were the sails of Tyrian ships, and cloths placed over the body and head of the dead, as we see in the entombment of Jesus. The use of linen for the deceased was, perhaps an influence from Egypt, where mummy bandages, sometimes hundreds of yards long, were exclusively of linen, and where piles of enormous hand-woven linen sheets 60 ft. long, beautifully fringed, were placed in rock-cut sepulchres or pyramids with the deceased, as we see in specimens at the Metropolitan and other museums.

Paul doubtless watched the famous linen looms operated on a large scale at Laodicea, in Asia Minor, a city he often visited in establishing Christian groups. Beth-shan, at the gate of the Jordan Valley, was an imperial linen-making center in the fourth century A.D., as were Byblos, Berytus (Beirut), and Tyre.

COTTON

This fabric is thought to have been brought to the Near East about the time of Alexander the Great, in the fourth century B.C. from India, although it may have come from central Africa to Egypt earlier. However, as Elizabeth Riefstahl of the Brooklyn Museum suggests, the use of cotton in Egypt before the Islamic period is very doubtful.

SILK

This delectable material used by rulers and officials may have come into Bible lands through merchants, bringing it from the rivers of India to which it had come out of China, its home. It was imported in raw-silk form to Phoenician cities, as well as to Persia and southern Europe. Berytus and Tyre wove and dyed it. Medes and Persians so prized it for their jackets and skirts that Greeks called silk "Median garments." Ezekiel refers to silk as a luxury

given by Jehovah to Jerusalem (16:10). In Dura-Europos silk robes were gorgeous in early Christian times. In later centuries Syria grew the mulberries fed to the larvae which spun the almost invisible silk threads in the early stages of their chrysalis. Syrian looms for brilliant silks have long been famous. They still produce gorgeous fabrics shot through with threads of silver and gold, although synthetic materials are now used more than pure silk.

MIXTURES

Ancient Hebrew law forbade laymen to wear garments of mixed wool and linen yarn (*shatnez*). Priests might, however, use this "mingled" material (Lev. 19:19). It is hard to get the reason for this in our age when we are so accustomed to cloths of mixed rayon, wool, cotton, and nylon. Possibly *shatnez* was forbidden because pagan neighbors featured "mixtures."

CHECKER WORK AND WOVEN WORK

We imagine that this item of priestly attire mentioned for the priest's coat (Ex. 28:39) may have been a fancy weave or almost a brocade of fine linen. The ephod was of blue "woven work," as was the binding which protected the neck of the ephod from tearing (Ex. 28:32). Woven work was a forerunner of the fabulously beautiful brocades of silk and gold in Persian times, portrayed in many a tile and vase. The prophet Ezekiel, who lived in "the land of the Chaldeans," described the gorgeous textiles of Assyrian horsemen. He knew, too, the bales of embroidered "rich apparel" distributed by Phoenician merchants of Tyre (Ezek. 27:24).

In the Dura-Europos synagogue paintings, Moses (or Aaron) is shown wearing a checker work cloak.

APPLIQUÉ

Motifs applied to fabric may have originated with ancient Persians, although the description of the pomegranates and bells on the skirts of the Hebrew high priest's garments suggest either appliqué or embroidery early in Jewish history (Ex. 39:24-26).

"AFFILIATED" CLOTHING CRAFTSMEN

DRAPER

Ancient dandies needed no tailors but called into service the best experts in draping the voluminous folds of their long rectangular cloak or semicircular Roman toga (*pallium*). The English "draper" today is a seller of fabrics, a dry-goods merchant. He who arranged the Roman drapery was the *vestificus*.

DYER

Hebrew dyers were especially skillful. We shall refer to them below (*Professions and Trades*, p. 353).

FULLER

When garments were hand-woven and costly but not numerous, it was important to have them frequently cleaned. The élite Graeco-Roman world of Jesus' time patronized the baths and took pride in personal grooming and perfumed grace.

Fullers constituted an important craft in the first century. For example, in the excavated Italian city of Pompeii, the structure ranking next in importance to the basilica itself fronting on the forum is the Building of Eumachia dedicated by the Priestess Eumachia, patron of the fullers' union, to Augustus and his wife Livia. In this building met the fullers' corporation, including launderers, pressers, dyers, cleaners, and traders in wool and cloth—a group influential in elections. For description of the equipment of a first-century fullery, the famous Fullery of Stephanus at Pompeii, see Professor Maiuri's *Pompeii*.

Fullers' fields outside Jerusalem were conveniently located "near the conduit of the upper pool," west of the capital. There cloth new and old was spread out to shrink and dry after being treated to lye, water, and such a pounding as is still given clothes by many primitive people who wash along stony river banks. Fullers loosened dirt by tramping garments in bronze vessels with their feet.

We can understand the dazzling effect suggested in the New Testament reference

to Jesus' garments on the Mount of Transfiguration, "glistening . . . so as no fuller on earth can whiten them" (Mark 9:3).

WEAVER

For this basic industry of the apparel-makers, see *Professions and Trades*, page 353.

NATIONAL MODES

BABYLONIA, ASSYRIA, AND PERSIA

(3000-424 B.C.)

The fascinating cylinder-seals of c.3100 B.C., found by Woolley at Ur, ancestral home of Abraham in Sumerian Mesopotamia, indicate that hunters went nude except for their belt, and that kings wore loincloths and small caps. Soon the reed-kilt or the fleece skirt came in. In a remarkable limestone bas-relief found in the Royal Cemetery at Ur barefooted male servants are seen advancing beside a chariot. They are clad in the knee-length kilt of natural wool with fringed effect at the bottom (illus. 108). Such fringed fleece skirts and their descendants persisted for thousands of years in Babylonia and Assyria. Sometimes they reached to the knees and were jacked up to the armpits. Again they were in three tiers. When the fleece was worn inside out, fringe showed at the bottom.

Henri Frankfort in his *Sculpture from the Third Millennium B.C. from Tell Asmar* suggests that the fleece skirts developed into the nubby-knotted cloth and carpet piles used later in Egypt and Persia.

Earliest Sumerian women, of whom we have record in art, wear a simple length of cloth drawn over the left shoulder across the breast and under the right arm. Queen Shub-ad of early Ur (c.3100 B.C.) was so covered with a network of jewels when found by Woolley that he was unable to determine much about her costume. For her royal headdress, see *Jewelry*, page 274. It is evident that Sumerian women gave more attention to headdress than to apparel. They parted their hair in the middle, made pigtails, and wound them around their heads in a series of twistings and tuckings-under.

In the Babylonian period of c.2100 B.C., as shown in the statue of Gudea, viceroy of Sumerian Lagash, the costume is of draped stuff thrown gracefully about the body, leaving the right arm bare. Gudea may have worn the native Sumerian turban rolled soft around his face. The Amorite Hammurabi, ruling all Mesopotamia in the name of Babylonian civilization (c.1728-1686 B.C.), wore the ever-popular round turban and a flowing robe reaching to his ankles, with right arm bare. Abram knew such styles, for he was contemporary with Hammurabi.

In the Babylonian-Assyrian period 1500-550 B.C. the fringe at the bottom of an official's garment (candys) persisted. To it was added a fringed shawl which might take the form of a tunic. Hebrew priests and rulers evolved it into a fringed vest or chasuble.

Assyrians of the Sargon II era (c.722-705 B.C.) delighted in lion-hunting and heavy warfare such as they used to conquer Israel. Then they relaxed to months of luxury in their harems, clad in the heavy, ornate attire we associate with them and their art. Their apparel, as described by René Grousset, included an amazing deep-blue robe, trimmed with rosettes and fringed at the hem, with jewels worked into the fringe. Through their rich woven girdles, gold daggers were thrust, and over the robe was a vest covered with embroidered flowers, ornaments, and jewels, making a dazzling ensemble in eastern sunlight.

Costumes of Assyrian women about 668 B.C. resembled men's, as we see in a bas-relief of Assurbanipal and his wife in the British Museum. Both of them are wearing long fringed tunics and shawl-capes.

We have little to tell us how Achaemenian women of the Darius-Xerxes courts looked. But one valuable old Persian relief in the Osmanli Museum of Istanbul shows two women on horseback, with robes to their ankles and long veils draping their heads and extending to the hem of their garments—but not drawn over their faces or up under their chins. This same type of long robe and head-mantle appears on captive women from Judean Lachish. Assyrian bas-reliefs suggest that royal women of the Assurbanipal court (c.668

B.C.) wore the fringed tunic and shawlcape of the court men.

Achaemenian dynasty costumes tell us, in sculptured friezes, how Persians looked during the triumphs of Cyrus in 549 B.C., through the various Dariuses and Xerxes and Artaxerxes down to the conquests of Alexander in 333 B.C. Workmen of Darius and Xerxes wore short kilts, with round fez-turbans on curly wigs and short capes. Nehemiah, carrying a cup of nectar to Artaxerxes, may have been dressed thus (Neh. 2:1). If we look at an Iranian king's costume in the brilliant Achaemenid period (549-334 B.C.) in the bas-relief of Darius and his son Xerxes found at Persepolis by the Oriental Institute of the University of Chicago. (illus. 22), we see a gown falling to the ankles, with wide pleated sleeves and characteristic graceful folds falling at the left side of the skirt. These folds, suggests Ernst Herzfeld, were on their way to a Greek drapery influence of which Persians were not aware.

From this picture we can imagine how Ahasuerus (Xerxes), husband of Queen Esther, dressed in his palace at Shushan. Sometimes the long tunic, in crinkled brocade type of fabric, was covered by a cutaway-tailored-coat effect, worn over trousers. The coat was caught at the shoulders by toggle pins, such as earlier Babylonians had used to fasten their cylinder-seals to their garments.

Since even the Persian palace guards were decked in elaborate robes of figured woven textile with long flowing sleeves, we may imagine that Queen Esther was resplendent when she "put on her royal apparel"—after the usual preparatory year of personal grooming with myrrh, oils, and other purifying perfumes. When the king saw her standing in the court, he held out his scepter inviting her to the throne, and placed on her head the royal crown of his deposed Vashti. How she nobly used her personal adornment in her nation's hour of crisis is a glory to her oppressed people.

The attire of Mordecai, uncle of Esther, is described in the Book of Esther, written late in history but with accuracy of local color. He dressed in the national Persian colors, blue and white, "with a great crown of gold, and with a robe of fine linen and purple" (Esther 8:15).

Worn over tightly curled beards and wigs (illus. 22)—made rigid by settings with Babylonian mud, as modern curls are set with lotion—coiffure was accented among people living between the Tigris and Euphrates. Sometimes they wore a crinkled wool miter; sometimes a fat round turban; again a simple filet or tiara; again, a tall conical cap of several stories of bright-colored felts, trimmed with rosettes and jewels, with ribbons hanging down behind. Phrygian caps, worn by the Three Wise Men, pictured in now-vanished mosaics at the Bethlehem Church of the Nativity, stayed the hand of Chosroes the Persian in the seventh century from destroying this sacred shrine over the birthplace of Christ. We have seen an echo of this headdress in the mosaics of St. Apollinare Nuovo in Ravenna. Some of the head-tires of the Darius period gave the design of the medieval pointed "liberty cap" hood, with a wimple under the man's chin, as seen also in the picture of the Cypriote headgear with chin-cloth (illus. 24).

Persians are given credit for inventing fitted underwear and stockings. The Babylonian background of the Book of Daniel lists the attire of three men tossed into the fiery furnace, in breeches (or *hosen*), "tunics (or turbans) . . . mantles, and their other garments" (Dan. 3:21).

EGYPT

Because Egypt was contiguous with Palestine, and because Palestinians were going back and forth to Egypt from the time of Abraham and Joseph to the era of John Mark and his founding of the Coptic Christian Church, Egyptian influence in apparel was marked. In Genesis (41:42) we read that Joseph, being favored by the Pharaoh, was attired in "vestures of fine linen" [or cotton], with a gold chain about his neck.

FROM 5200 TO 1500 B.C.

One of the earliest clues to costumes in Egypt is that Egyptian women about 5200 B.C. wore forehead pendants to hold up their veils, even as some Moslem Egyptians today wear brass tubes on their foreheads to hold up their veils. All through Old Empire and feudal times the loincloth kilt or *sheuti* was worn by men (illus. 25).

It was like a wide scarf tied about the hips. Toilers and kings alike used it—usually white but sometimes in more royal hues. In later times this kilt was made with a sunburst of pleats spreading from the lower hem towards the waist, indicating the rays of the sacred sun. Even great Queen Hatshepsut sometimes wore the Egyptian national kilt, as well as the artificial beard which was the badge of royalty. Elegant Eighteenth Dynasty King Tut-ankh-amun wore the kilt when hunting.

The second traditional feature of Egyptian attire was the squared-off headcloth, or *nemes*, seen in our illustration 25 of the great Khafre's statue in the Egyptian Museum (c.2700 B.C.). Women of feudal times wore long tight tunics held up by shoulder straps.

FROM 1500 TO 1100 B.C.

In the New Empire, which began with the Eighteenth Dynasty, more elaborate modes came in, indicating Asiatic influences after conquests of Tuthmosis III in Syria and Palestine. Men wore long, pleated or goffered skirts, with sunburst kilts surviving as broad sashes. Men, as well as women, stressed wide, flat necklaces (illus. 154). The elaborate wigs of earlier times gave way to shaven crowns to accommodate the head to high headdresses. Akhenaton and his queen, Nefertiti, wore short hair and tall stiff caps with ribbons floating in the breeze. On occasion, they wore thin scarves tied like short capes across the chest. Women's apparel was like men's, graceful flowing garments of thinnest transparent muslin allowing their figures to show. These gowns were often skillfully embroidered or trimmed with gold flower rosettes. At banquets "favors" of flat necklaces made of pottery, dates, poppies, daisies, and pomegranates bedecked the guests.

Elaborate wigs worn during most Egyptian dynasties were practical, for they were removed in-doors and the comfort of short hair enjoyed in hot climate. Enormous wigs were made of human hair or of sheep's wool.

We know several actual textile weaves used by Egyptians from fragments found in tombs of Tuthmosis III and Tut-ankh-amun; in graves at Palmyra and Dura-

Europos; and in Romano-Coptic Egypt. Illustrations 239 and 240 show several types of apparel with which Egyptians clothed their gods. In most cases these are similar to royal attire.

Priests sometimes wore cloaks over their loincloths, or breastplates of leopard skin, heavy cloth, or fur.

Personal attire of Tut-ankh-amun displayed in the Cairo Museum gives a detailed idea of how he and his court dressed. This, together with art depictions of the young king, indicate his long skirt; wide, flat jeweled collar worn over his bare chest; and a linen garment cut to imitate a leopard's skin, with gold stars for spots, and silver claws. On certain occasions he wore fringed linen scarves or shawls striped with blue and brown or edged with birds. Fringed tapestry scarves were also in his royal wardrobe. His elaborate wig and headdress appear in the solid-gold mask shown in illustration 154. When his body was found, it was wearing golden sandals. Sandals and sometimes soft leather shoes were common in the New Kingdom. Sometimes they were of papyrus, again of leather encrusted with gold or beads. In earlier Egypt, women and great men preferred bare feet indoors. Even in the out-of-doors, men in the Old and Middle Empire often had their sandal-bearer carry the footgear.

Of personal accessories Tut-ankh-amun had a surfeit. His gold and silver finger and toe stalls we have seen in the Cairo Museum; also, his gorgeous ostrich fan, his linen or tapestry gloves, and his parasols. For his jewelry see Section 13.

Egyptian clothiers came up to their Eighteenth Dynasty skill over a long period, for Sir Flinders Petrie found that they had used needles and toggle pins to hold their garments on earlier than 3000 B.C.

GRAECO-ROMAN EGYPTIANS

In the last four centuries before Christ, styles prevalent in Greece and Rome were seen in Egypt. Fine linen cross-shaped tunics trimmed with ornaments woven on tapestry looms and with woven-in sleeves were common. So was the long rectangular cloak of linen faced with the little woolen

loops reminiscent of ancient Mesopotamian fleece-fringe, as Grousset indicates.

COSMETICS

Among Egyptians and all people of the ancient Near East cosmetics were valued. Ivory combs have turned up in great numbers, and mirrors of highly polished metal, as we have seen in Naples Museum. An ivory rouge-pot found at Beth-shan, in the 1479 B.C. level of Tuthmosis III, is now in the University Museum at Philadelphia; so, too, an archaic Egyptian wooden toilet-box with its original metal rivets on a lid carved with a Maltese cross. In this same museum are bronze razor blades 4 to 6 in. long for shaving hair; ivory and bone hairpins; bodkins; and a little stone mill for grinding eye-paint, used in 3000-2800 B.C. There, too, we have seen an iron chatelaine, or buckle, from which dangle a wooden stick for applying kohl to the eyes; a hook for removing ear-wax; tweezers; a knife; and a stiletto.

Egyptian cosmetic spoons with handles of skillfully carved nude women have come to light from the Later Theban Empire. Artistic examples of make-up gadgets appear in Elizabeth Riefstahl's booklet, *Egyptian Toilet Articles*.

Palestinians were just as keen devotees of beauty kits as Egyptians. What appear to be a curling-rod and ivory comb have been found in the Lachish mound at the level of an Amenhotep ruling in 1400 B.C.

We know from the Second Book of Kings (9:30) that Jezebel of Samaria painted her eyes and attired her head. Toe- and fingernails were tinted then, as now, with henna-plant juice. Rouge and paint were applied to faces of men and women, and heavy black lines traced under their eyes to make them look larger.

In the Assyrian Room of the British Museum there is a blue paste tube for eye-paste. Some of the most exquisite toilet sets have come from Ur, dating from perhaps before 3000 B.C. (see *Jewelry*, p. 275).

GREECE AND ROME

Greeks who lived in the centuries paralleling later Old Testament times wore a *chlamys*, or short outer mantle to the calves, fastened at the shoulder or worn as a shawl, or sometimes knotted at the waist.

to facilitate movement, as in the statue, "Diana of the Hunt." Under this was the tunic, *chiton*, of wool or linen, made by taking a rectangular piece and folding it at the top to suggest an over-drapery, held in place by a bandeau under the breast or a sash at the waist. Room for the head was cut at the neckline. Sometimes the graceful folds of the *chiton* were held in place by pins, *fibulae*. The Caryatids and Athena Pensive wore this type of archaic *chiton* (illus. 27). Ionic Greeks preferred a straight, long *chiton* not folded over. The latest forms of the garment had sleeves sewed in. Greeks may be debtors to Phoenicians for their *chitons*, sold by traders. The *peplos* in Phidias' statue of Athena, looking like an added sleeveless tunic, was a square or oblong shawl fastened just above the breast. The *himation*, or rectangular garment of Greek men and women throughout the Mediterranean world, was a cloak worn over the *chiton*, larger than the *chlamys* mantle.

Greek travelers wore brimmed felt hats called "petasos," with strap under chin. Luke may have worn one.

Roman men wore, in Christ's time—and long before and after—a basic tunic to the knees, with a top layer formed by the voluminous rectangular *pallium* or the even more famous *toga*, a semicircular cape whose straight side was worn uppermost, the balance falling in rich folds. Senators and emperors wore embroidered or striped tunics of wool, linen, or silk. The *toga* was a cumbrance and was laid aside at home. The rectangular, long cloak was also worn by Roman men. Paul, a Roman citizen, wore such a cloak.

Roman matrons wore a *stola* similar to the Greek *chiton*, over an inner tunic to the ankles; and over the *stola*, the woman wore a *pallium*, or rectangular woolen garment she could draw up over her head. Her hair was piled high with stiff little "croquignole" curls, bound with a series of fillets—precursor of the Empress Eugénie French Empire style.

HITTITES, SYRIANS, ELAMITES, PHOENICIANS

Up until 1500 B.C. these people, men and women, wore long shirtlike tunics tied

at the neck with cords. Poor Syrian men wore kilts to the knees.

They also copied the long and sometimes embroidered tunic, of Assyrians, and the fringed shawl, drawn up over the left shoulder, leaving the right arm bare. Later they wore a cape-shawl with a skirt lapping over the side, both fringed. A loincloth was worn under the tunic.

Women's garments in Syria of the fifteenth century B.C. could be three-tiered, belted skirts to the ankles.

Fine textiles handsomely dyed must have been common among rich Phoenician sea-traders. Their wives, as indicated by an ivory statue in the Louvre, wore long-sleeved, ankle-length robes in soft folds, with a shorter garment coming to the waistline, and between the two, from the breast, a girdle reaching to the hem. Phoenician men of Tyre, familiar with schools of wheeling porpoises playing in warm Mediterranean waters, as they still do, shod themselves with shoes of porpoise-skin—not of sealskin as suggested by the translators of the American Standard Version (Ezek. 16:10).

ISLAND ATTIRE

In Cyprus, the island sixty-nine miles west of Syria, men- and women-priests of Aphrodite were wearing at about the time of the Hebrew captivity garments which were a combination of the long Assyrian tunic, fringed and embroidered at the bottom, and a Greeklike cape-drapery, or *chiton*. They wore braids of hair over their shoulders under a round skull cap (illus. 144). A Cypriote woman's headgear of 300 B.C. and later appears in illustration 24.

Crete of 1500 B.C., as we learn from frescoes and vases at Knossos, featured for men loincloths of figured material tightly girdled to make wasp waists in contrast to broad shoulders. Cretan men, whether seakings or cup-bearers, wore the loincloth and belt (illus. 50). Women wore wasp-waisted tiered skirts, bell-shaped as in the "gay nineties" of our era, with tight bolero or zouave jackets, open at the front to show their breasts (illus. 23). A small apron completed the woman's attire. Men and women both wore long hair, with

locks down over their front shoulders. Cretans were fond of color, using alternating tiers of tan and green in women's skirts.

Attention was paid to footwear in Crete. Boots of white or soft tan, with red or blue trimming, were popular. To these a sort of puttee was sometimes added. Leather gloves were worn in Crete of 1500 B.C.

Later Aegean islanders wore the garments of the mainland of Greece.

PALESTINE

ARTICLES OF APPAREL

Loincloths were worn by toilers. These were of cotton, sackcloth, or animals' skins. Priests wore loincloths of linen under their vestments. In fact, they called the putting on of their ephods "girding themselves."

To be girded about the loins meant to be ready for a strenuous task, to be prepared. The soldier girdled his sword on his thigh by his girdle (I Sam. 17:39). In fact, the loincloth evolved into the girdle—or possibly the loincloth developed from the girdle when a piece of fabric was drawn tightly about the hips.

Symbolic mention of girding is frequent in Scripture. The Psalmist cried, "It is God that girdeth me with strength" (18:32). Daniel envisioned a man "clothed in linen, whose loins were girded with pure gold" (10:5). The angel of Peter's liberation from the Jerusalem prison instructed him to gird himself, bind on his sandals, cast his garment about him, and follow on (Acts 12:8). Paul carried over this imagery into his advice to Christians in the Ephesian letter: "Having girded your loins with truth," stand (6:14).

The girdle of folded cloth, or *hagor*, was worn over the coat for a belt. A square or triangle of woven fabric was folded over to make a diagonal strip about 4 in. wide and 36 in. long, with a slit at the top to contain loose change and other small treasures. Hence the quantities of coins still turning up in fields. Daggers and inkhorns were also thrust through a man's girdle. And up over the useful girdle were drawn the folds of a worker's garments as he bent to the farm tasks (illus. 2) or over his stonemasonry. A favorite textile for girdles is still the Paisley-like woven work—not un-

like the materials loomed by the thrifty housewife described in the last chapter of Proverbs (31:24), who delivered these products of home industry to traveling Phoenician merchants.

The *headdress* of a Palestinian man starts with a cotton or a wool skull cap (*libbâd*) over which a fez (*tarbûsh*) is worn. This is wrapped about with colored or white cloth to make it a turban. City men wear just a red *tarbûsh*. Bedouins and shepherds, as well as certain city Arabs, wear graceful veils of yellow or white, sometimes fringed, hanging down over their striped coats and blue jackets (illus. 28). This veil (*kefiyeh*) is made by folding a yard-square cloth diagonally and holding it in place with black goat's-hair rings, *agals*. The *kefiyeh* floats gracefully as the shepherd walks along at the head of his flock of sheep and goats (illus. 16). It gives him a kingly look. It also protects the back of his neck from the dangerous rays of the hot Palestine sun.

Sandals are still made by taking pieces of leather the size of a person's feet, and sewing straps to hold them onto the ankles. Pieces of cowhide, sewed by the weaver, make stout shepherd's shoes. Sandals are removed when the wearer enters his house or kneels to pray. Often men and women walk barefoot along roads, carrying their sandals to make them last longer. Pointed leather slippers are also used, with their backs folded down to give the foot more freedom.

As for hair, young men of the East wear mustaches; older men, beards. Shepherds let their hair grow long (illus. 29). Pious Jews wear little curls (forelocks) over their foreheads (illus. 189). In contrast, Romans and Greeks preferred smooth shaves.

The shirt. This inner garment reaches below the knees. It is a tunic made of a long piece of cotton cloth folded at the center and sewed up at the sides, leaving room at the top for armholes. An opening for the head is cut after the garment is bought. Men and women both wear such a nightshirt sort of apparel.

The long coat, or kufan, made the next layer. This was the indoor garment enjoyed after the heavy wool robe was removed. The coat was, and still is, of gayly colored striped cotton material of close

weave sold in every good bazaar. It is called "the cloth of seven colors" because bright narrow stripes of green, red, yellow, blue, and white alternate. It may have a narrow standing collar; it fits tightly around the waist and laps over below the knees. The sleeves, which are set into armholes, are narrow and reach below the wrists. Usually the *kufan* is lined with white cotton material to give it more warmth. In cold weather, one *kufan* is worn on top of another. The more layers a man wears, the more prosperous he looks. Such a garment may have been Joseph's "coat of many colors."

The cloak (*simlah* or *aba*) is the outer layer of a Palestinian man's attire. City Arabs or "Belladeen" substitute a modern blue serge jacket, *turksûreh*, over their striped *kufan* and carry a cane (illus. 25). Priests, whether Jewish, Arab, or Christian, wear a dignified, loose, long cloak similar to a Geneva gown on top of their *kufans* (illus. 189). This cloak is unbelted and its sleeves are wide at the hand. Rich merchants trimmed the front of their cloaks with fur or velvet and wore a fur turban.

The shepherd (illus. 29) still wears the heavy square patriarchal cloak called the *simlah*. This may be of home-woven wool, in wide black and white or brown and cream stripes. It is made by taking one piece of cloth 7 ft. wide and 4½ ft. from ankle to neck. The maker folds over about 1½ ft. of the goods, making a front and a back to the garment; then he sews it along the two shoulders and leaves a slit at each corner for the arms. This garment is known as the "seamless robe" (see p. 61). Instead of using one piece of cloth 7 feet long and 4 ft. wide, two pieces 7 ft. long and 2 ft. wide are often stitched together by hand, as in our picture of the shepherd. In Jesus' mantle this horizontal seam was missing, for his was of one piece from shoulder to seam. Rich men used gayly striped hand-loomed silk from Damascus for the seamless robe, or *simlah*. Sometimes rough goat's-hair cloth is used. Elijah's mantle may have been a *simlah* or a long rectangle of cloth (II Kings 2:13).

The rough, striped wool *simlah* is the most biblical garment still widely worn in Palestine. It is used as a blanket at night

when the shepherd lies down in the field; as shelter from rain, or as a prayer mat, laid on the ground because the man is too far away from his usual worship place.

In Old Testament times, poor women dressed in homespun tunics. Vain "daughters of Zion" are described by Isaiah as wearing fine linen, festival robes, shawls, satchels, turbans and veils, jingling anklets, nose-jewels, pendants, bracelets, and nets.

From attire of peasants today we gain an idea of how the prosperous farm women of Old Testament times may have looked. First came the *shirt-dress*, or tunic, to the knees. Then a full, long *dress*, or *khurkah*, usually of blue crash, sometimes of black, with touches of red embroidery at the neck. The dress has a wide girdle over which the flowing dress is pulled to shorten it while at work. Many women have but one dress, which is a maternity gown, a work garment, and a shroud at last. Various villages today have their own type of gown. None is more beautiful than that worn by the Christians of Ramallah, except the Bethlehem woman's attire. Her *khurkah* is made of blue crash with little red and yellow stripes and flaring gores of green and yellow set into each side.

From neck to waist in the front there is a hand-embroidered *bib*, often of bright yellow, with red stitches trimming it. Many a *bib* is the pride of the wearer. The sleeves are pointed and very long, flaring as in Persian style and reaching to the knees. The pointed sleeves are pinned together behind the shoulders when the woman is baking or weaving or grinding grain. When marketing, she may carry fruit or vegetables in her sleeves. When cutting grain, she tucks up her wide dress to make a sack for the barley or wheat. Her *girdle* is often a folded piece of woven goods, soft and durable. The Bethlehem matron's headdress is queenly. It consists of a high red cap (*uká*) or *tarbûsh*, from which floats a long, pure-white cotton veil, lace-edged, reaching to the hem of the dress. To the front of the red bonnet are sewed many coins (*saffah*) suggesting the bride's dowry. If she has a son, she adds a larger coin (*iznak*) to her jingling necklace. It was once considered a sign of lost virtue to lose one of the bridal coins. The woman in Christ's parable turned her room upside

down until she found her lost coin (Luke 15:8). Unmarried women wear the veil only for headdress. For festival occasions, a short red flannel jacket, lined with figured cloth and having long sleeves, is worn over the Bethlehem dress. This style of attire may go back to Bible times. It was carried back to Europe by Crusaders during the twelfth and thirteenth centuries for their wives. It is one of the most flattering costumes in the world. High headgear and wimples of medieval times originated in the Near East.

Jewelry. The Bethlehem wife today, if she is Christian—and most Bethlehemites are Christians today—may wear one of the famous Bethlehem silver crosses, resembling a flower. It is a square type of cross with four groups of three palm leaves, symbolizing the twelve disciples. It bears a flower at its center, a crown of thorns and spears such as pierced the side of Christ, and nail heads. If the woman is a Moslem, she wears a silver boxlike amulet or a crescent-pendant or blue beads “to keep the evil eye away.” It is a poor Palestine woman indeed who does not wear one or more rings, often silver with blue stones, and also several bracelets of heavy silver. Poor women wear glass bracelets, made in Hebron, home of Sarah. Often they wear long, heavy silver chains and pendants of genuine amber. Desert women may have their only wealth in the form of ancient jewelry inherited from mothers and grandmothers. Flat necklaces of silver or gold, with designs used in Bible times, are still made in the little silversmiths’ stalls near David Street in Jerusalem and in the silver market of old Damascus.

WHAT WERE THE GARMENTS OF JESUS?

From Luke, the Greek-minded physician, we learn that Mary wrapped her first-born son in “swaddling clothes, and laid him in a manger.” Thus the baby Jesus followed the custom of poor people of his own Palestine. Christian mothers in Bethlehem still swaddle their babies with neat, narrow bands of colorful material, as seen in illustration 26 of a doll from Bethlehem, properly swaddled as to its

head and body and lying in an ancient stone manger brought by us from Bethlehem and now in the Children’s Chapel of the Hanson Place Central Methodist Church of Brooklyn. Notice the little “hand of God” anulet fastened to the headdress, which looks like a cross between a turban and a nun’s wimple. Observe how the stone manger, lined with sweet new straw, is a not-too-uncozy “basinette” for the infant Jesus. The band is drawn under the baby’s chin to teach it to breathe through its nose.

When Mary’s kind neighbor at Bethlehem swaddled the infant Jesus, after he had been rubbed with salt as all Judacan babies were, she placed him on a square of cloth with his head in one corner and his feet in the diagonally opposite corner and then folded the cloth over his sides and feet. Next, she took plain bandages—for only the rich could afford embroidered strips—and tied his hands to his sides. During the day the clothes were loosened and the child rubbed with olive oil and dusted with powdered myrtle leaves. Swaddling was continued until the child was several months old. The little Palestinian “papoose” of Christ’s time—and today—was more conveniently carried to work on his mother’s back in a woolen cradle than if his body were free. At night his wool cradle swung from two forked sticks.

The great French artist Tissot in the nineteenth century went to Palestine and there planned his superb series of water colors of Old and New Testament life. He depicts the teen-age Jesus as attired in the under-tunic and colorful striped coat and girdle still worn by Arabs, topped by the wide, seamless *simlah* having broad stripes of dark red and of white. Jesus, reared in a poor man’s home at Nazareth, knew what it was to have Mary put a piece of new cloth “upon an old garment” (Matt. 9:16).

We disagree with Tissot when he painted Jesus clad in a flowing white robe, over which he wore a voluminous white mantle or rectangular *simlah* such as a Greek philosopher might have swathed himself in, with a generous portion thrown over his head for protection against sun.

Such Greek grace would have become Christ well. But we cannot think that anyone so absorbed in a practical ministry to sick and to pressing throngs and to disciples needing the lesson of foot-washing for the sake of humility would have found such flowing garments convenient. We like to think of Christ attired like an immaculate Arab gentleman we once saw in Jerusalem walking near the Temple Area. His entire costume, comprised of the seamless robe and all the other traditional elements described above, was of dazzling white. His tall, lean form moved with majesty through the sordid stone streets of the little walled city as Jesus often did, in silent observation. The whiteness of Christ's garments, as we have already said, is indicated by the Transfiguration detail, that they became on the mountain glistening "like light" so that no fuller could bleach them whiter. We imagine that Christ wore sometimes a mantle of deep blue or red. It was for this cloak that soldiers gambled. John suggests (19:23, 24) that each of four soldiers took one of his garments—shirt, tunic, coat, girdle, perhaps—but cast lots for the seamless mantle which was too valuable to cut. Lloyd Douglas' *The Robe* imagines Christ's mantle as being brown Galilean homespun, thorn-torn.

When Jesus went into the Nazareth synagogue and stood up to read, he probably placed over his head a striped and fringed prayer-shawl, a *tallith*, still used in Hebrew worship.

His feet were shod with sandals, laced up with leather thongs possibly after the Roman manner. Hence John the Baptist's allusion to the "latchets of his shoes" which he was not worthy to unloose.

Accounts of the burial clothes of Jesus imply that he was bandaged after the Hebrew manner (which they may have adopted from Egyptians) in "linen cloths with the spices" (John 19:40). Mark implies that one large linen cloth was brought by Joseph of Arimathaea and wrapped about the body of Jesus. Perhaps another was laid over his face. This large linen cloth could have been the mantle in which the "young man . . . arrayed in a white robe" was sitting on the tomb when the Easter women came (Mark 16:5).

PRIESTLY HABITS

The "finely wrought" holy garments prescribed for the early high priest Aaron and his sons in the Levitical law are in sharp contrast to the simple attire of Jesus, who advocated a reform in elaborate apparel and even suggested that, if a man had two coats, he give one to him who had no coat at all.

From Ex. 28 and Lev. 8:6-8 we get details of the priestly attire: the linen breeches, "from the loins even unto the thighs" (Ex. 28:42), and the undershirt. Over the shirt and breeches went the robe, entirely of blue fabric, with a hole for the neck and with a border of blue, purple, and scarlet pomegranates alternating with golden bells—either appliquéd or woven in—which tinkled as the high priest walked. Over the robe was worn the ephod, a sort of vest from under the arms to the waist. This vest which might be either of white linen, such as a temple assistant like Samuel would wear (I Sam. 2:18), or of skillfully woven gold, blue, purple, and scarlet thread combined with "fine twined linen" and held to the shoulders by two bands. A girdle of similar material attached this vest-ephod to the body. A breastplate elaborately jeweled (see Jewelry, p. 266) was worn over the ephod.

Synagogue garments worn by both worshipful Hebrews and rabbis in time of Jesus featured the *zezith*, or fringed tassels fastened to each corner of the *simlah*, or robe—which sometimes was in the form of a long rectangle, like the Greek himation. Fastidious ceremonial stress was laid upon these tassels, which Jesus wore, of course, and which the woman caught hold of in her plea for health (Matt. 9:20). Sometimes this robe was sewed at the shoulders, becoming then more of a cloak than a huge scarf. Into the fabric of the elaborate ephod of Aaron went gold threads, made by beating gold into thin plates and cutting it into wires which they worked in the blue, scarlet, and purple tapestry (Ex. 39:2, 3).

The head-tire of the high priest was a miter or turban with the sacred inscribed gold plate at the front (Lev. 8:9)—"the holy crown: as Jehovah commanded Moses."

The people were proud of their priests attired for great ceremonies, such as the rededication of the Temple at Jerusalem under Ezra when "they set the priests in their apparel with trumpets" in the forefront as the builders laid the foundation stones on the ancient site on Mount Moriah (Ezra 3:10).

The wise Persian "governors beyond the river" who carried out Artaxerxes' clement permission for the Jews to return from Babylon saw to it that the gifts they carried with them included not only hundreds of camels, asses, horses, and mules (Neh. 7:68-70); but "the governor gave to the treasury . . . five hundred and thirty priests' garments," along with a 1,000 golden darics, the finest coins in the world at that time.

The tassels were tied by "a cord of blue" (Num. 15:38) inserted in a hole exactly at the center of a piece of square cloth applied to the corners of the *simlah*.

The striped prayer shawl, or tallith, still worn by orthodox Jews at worship, evolved from the *simlah* which was drawn over the head when the man was at prayer. A small tallith in the form of a vest, with tassels, was worn even in times of persecution under the outer clothing of orthodox Jews.

We can picture the high priest Annas and Caiaphas of the trial of Jesus as wearing all the "lugs" of ornately woven apparel that they could carry—conspicuous fringes, swathed turbans, fur-trimmed robes, and expensively woven tallith with the number of fringe-threads meticulously measured to denote symbols of the Jewish law.

ROYAL ATTIRE

A king such as David wore a linen *cphod* and a fine linen robe (I Chron. 15:27). Kings of Israel and of Judah, such as Ahab and Jehoshaphat, always decked themselves in voluminous, richly colored robes of scarlet or purple when they went into the open spaces by city gates to sit on their

thrones. A tasseled overgarment and a conical turban were essentials.

Ezekiel, who had seen kings in Babylon, describes also the merchant-princes at Tyre, who would remove their gorgeous robes and brodered garments as they came down from their thrones in the ruined city.

Royal princesses, such as Tamar, daughter of David, wore gowns sounding oddly like Bethlehem women's—garments "of divers colors . . . for with such robes were the kings' daughters that were virgins apparelled" (II Sam. 13:18). A footnote calls it "a garment with long sleeves."

SOLDIERS' MAIL

From Graeco-Roman art we know how soldiers of Rome looked in Jesus' time. They wore short pleated tunics, over which went a heavy cuirass of leather studded with pieces of metal and fringed with leather at the bottom, and heavy metal helmets. Wealthy Romans wore all-metal cuirasses in some periods. They were equipped with the voluminous rectangular cloak which was useful for disguise. Leather sandals or buskins were worn over socks.

In early Egyptian times the militia wore a short linen skirt to the center of which was attached a narrow heart-shaped guard of leather. Egyptian militia used "scale armor" but not coats of mail until after Eighteenth Dynasty contacts with the east, where Assyrian coats of mail were of famous fineness.

In Palestine and Syria during Bible times armor consisted of an upper breast-plate and a lower armor. The arca between was vulnerable, as King Ahab found when fatally wounded by a javelin at Ramoth-gilead (I Kings 22:34). Some authorities believe that solid-metal armor was not used until the second century A.D., and then it was of the type seen in Hadrian's marble torso found in the Athenian Agora, carved with a figure of Minerva standing on the "wolf of Rome" to indicate the Roman's admission of Greek superiority in certain matters.



21. Stone manger and hitching-posts in Solomon's Stables, excavated at Megiddo (I Kings 9:15, 17-19).



22. Relief from an eastern portico of palace courtyard at Persepolis, Iran, showing Persian costumes of Darius the Great (seated) and of Xerxes (standing behind him) giving audience to Median petitioners. (Oriental Institute, University of Chicago)



23. Attired in flounced skirt of ivory banded with gold, this wasp-waisted snake-charmer, mother goddess, or lady of the golden age in Crete (sixteenth century B.C.) wears a high tiara over her elaborate "hair-do." Her sprightly figure would have attracted attention in the "gay nineties" of America. (Museum of Fine Arts, Boston)



24. Veiled woman in terra cotta, from Cypriote Hellenistic period, after 300 B.C. (Metropolitan Museum of Art)



25. Famous folded head-cloth of Egyptians, worn by Khafre, builder of the Second Pyramid of Gizeh, in the Fourth Dynasty, soon after 3000 B.C. Diorite statue in Egyptian Museum, Cairo.



26. Swaddled babes of Bethlechem (Luke 2:1) have for centuries been cradled in stone mangers. A charm to ward off the "evil eye" on the child's headpiece.



27. The Porch of the Caryatides, Erechtheum, on the Athenian Acropolis, depicting Greek garments of maidens from Caryae. Inhabitants of Caryae, who had allied themselves with Persian invaders, were condemned by victorious Greeks to slavish labor.



8. Each wearing traditional long garment of striped material, kufan, and modern blue serge jacket with spotless white kumiyeh (head-veil), these four well-to-do town Arabs are having a Jewalk conference in Jerusalem.



9. Syrian shepherd in striped cloak, or abba, heavy hand-loomed goat's-hair cloth, his protection from rain and sun, heat and cold, day and night. Note black agals, or rings, to hold his kumiyeh in place; his skin water-bottle under arm, and rod in hand.

ADDITIONAL BIBLE REFERENCES

"To all of them he [Joseph] gave each man changes of raiment" (Gen. 45:22)

"his mother made him a little robe, and brought it to him from year to year" (I Sam. 2:19)

"Jonathan stripped himself of the robe that was upon him, and gave it to David, and his apparel, even to his sword" (I Sam. 18:4)

"An old man cometh up; and he is covered with a robe" (I Sam. 28:14)

"When I made clouds the garment [of the sea],
And thick darkness a swaddling-band for it" (Job 38:9)

"Gird up thy loins now, like a man" (Job 40:7)

"But as for me, when they were sick, my clothing was sackcloth" (Ps. 35:13)

"The king's daughter within the palace is all glorious:
Her clothing is inwrought with gold.
She shall be led unto the king in brodered work" (Ps. 45:13, 14)

"instead of well-set hair, baldness" (Isa. 3:24)

"Righteousness shall be the girdle of his waist" (Isa. 11:5)

"Can a virgin forget her ornaments, or a bride her attire?" (Jer. 2:32)

"in thy skirts is found the blood of the souls of the innocent poor" (Jer. 2:34)

"blue and purple for their clothing" (Jer. 10:9)

"I bought a girdle according to the word of Jehovah, and put it upon my loins"—and other words about symbolic girdle (Jer. 13:1)

"Take the filthy garments from off him . . . I will clothe thee with rich apparel" (Zech. 3:4)

"cast on him their garments . . . And many spread their garments on the way" (Mark 11:7, 8)

"let him that is in the field not return back to take his cloak" (Mark 13:16)

"Bring forth quickly the best robe" (Luke 15:22)

"let him sell his cloak, and buy a sword" (Luke 22:36)

"He that overcometh shall thus be arrayed in white garments" (Rev. 3:5)

BIBLIOGRAPHY

Albright, William F., *From the Stone Age to Christianity*, The Johns Hopkins Press, Baltimore.
Blackman, Winifred S., *The Fellahin of Upper Egypt*, Harrap and Company, London.

De Greferr, Paul Louis, *The History of Feminine Costumes of the World*, Foreign Publications, New York.

Erman, Adolphe, *Life in Ancient Egypt*, The Macmillan Company, New York.

Frankfort, Henri, *Sculpture of the Third Millennium B.C. from Tell Asmar and Khafajah*, University of Chicago Press, Chicago.

Gardner, Helen, *Art Through the Ages*, Harcourt Brace and Company, New York.

Grant, Elihu, *The People of Palestine*, J. B. Lippincott Company, Philadelphia.

Grousset, René, *The Civilizations of the East: Near and Middle*, Alfred A. Knopf, New York.

Hall, H. R., "Dress," *Encyclopedia Britannica*, VII.

Herget, H. M., "Daily Life in Ancient Egypt," *The National Geographic Magazine*, October, 1941.

Herzfeld, Ernst E., *Iran in the Ancient East*, Oxford University Press, London.

Lamsa, George, *Gospel Light*, A. G. Holman Co., Philadelphia.

- Lawrence, Col. T. E., *The Letters of T. E. Lawrence*, Doubleday, Doran & Company, Inc., New York.
- Lutz, H. F., *Textiles and Costume Among People of the Ancient Near East*, G. E. Stechert and Company, New York
- Marston, Sir Charles, *The Bible Comes Alive*, Religious Book Club, London.
- Mesnil du Buisson, Comte R. du, *Les Peintures de la Synagogue de Doura-Europos*, Pontificio Institute Biblico, Rome.
- Petersham, Maud and Mishka, *Stories from the Old Testament*, John C. Winston Company, Philadelphia.
- Radin, Max, *The Life of People in Bible Times*, Jewish Publication Society, Philadelphia.
- Riefstahl, Elizabeth, *Egyptian Toilet Articles* (Pamphlet), The Brooklyn Museum, Brooklyn.
- Sarre, Friedrich, *Die Kunst des Alten Persien*, Berlin.
- Thiersch, Hermann, *Ependytes und Ephod*, W. Kohlhammer, Stuttgart.
- Tissot, James Joseph Jacques, "The Life of Christ," water colors, Brooklyn Museum.
- Wilcox, R. Turner, *The Mode in Costume*, Charles Scribner's Sons, New York.

ARCHAEOLOGY

Jerusalem . . . and Babylon shall become heaps.

—Mic. 3:12; Jer. 51:37

Note—Additional references to archaeological finds in Bible lands appear in almost all sections of this book. See Index.

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INTRODUCTION

Archaeology is the new science of ancient things pertaining to the life of man. Archaeology of Bible lands includes the excavation, examination, photographing, recording, interpreting and synthesizing of information concerning various levels of human occupation. These levels occur on plains, or tells (low, truncated hillocks), usually near main roads. Artifacts (man-made objects) as lowly as a broken water pot from Jericho or as aristocratic as the golden helmet of Sumerian Meskalam-dug (illus. 114) are the alphabet by which scientists read the upturned layer cake of human history.

ATTITUDE OF BIBLE PEOPLE TO THEIR HEAPS

The Bible is full of allusions to the stuff of archaeology. Yet the people who wrote and read Scripture in ancient times,

and who were familiar with the events chronicled, did not try to explore or to understand historic cataclysms. They knew that the cities of the Plain along the Dead Sea had disappeared with abnormal natural accompaniments (Gen. 19:23-28), but they made no effort to learn what had become of the towns. They lacked the curiosity of modern scholars, such as Albright, who believe they have found the location of Sodom and Gomorrah beneath the chemical impregnated waters of the lowest body of water on earth. These cities, thickly populated in Abraham's time, were destroyed in the Early Bronze Age.

Prophets declared that Jerusalem and many fenced cities would become "heaps"—an excellent description of a layer in an occupied mound. Jeremiah prophesied that Babylon would become a desolation among the nations, with ostriches walking over her ruined palace floors and no more foreign guests arriving. Even the famous

city walls would fall, he cried (51:44, 58). These words all came true. Jesus declared that the proud harbor of Capernaum along the Sea of Galilee would tumble down as low as Hades itself, and that Jerusalem would be surrounded by earthworks of enemies who would not leave one stone upon another. Time and again, people of Palestine and Mesopotamia saw these catastrophes take place. They rebuilt on the ruins. Yet they had no sense of historical perspective about what they found when they dug below the surface to lay foundations of new homes. They saw in destructions by nature and man only God's judgment upon corrupt ways of life. But Jesus, when Pharisees attempted to silence disciples praising his mighty works, declared, "If these shall hold their peace, the stones will cry out." He had an intuition about the eloquence inherent in masonry, field-stone, and rubble of his native land.

A PARTIAL "WHO'S WHO" IN BIBLICAL ARCHAEOLOGY

Young persons contemplating pursuit of biblical archaeology as a life-calling will be inspired and awed by the equipment embodied in the lives of the major stars who have enriched the world by their careers, digging and interpreting biblical sites. We offer here, a partial list of men and women—some of them husbands and wives—who have extracted the ore of knowledge from seemingly dumb stones, ashes of burned cities, bits of broken pottery, and only occasionally hoards of golden treasure. Innate gifts for intuitive conclusions and synthesis, infinite patience and capacity for work, ability to get along even with suspicious natives who hail them into local courts on absurd charges, and the love of adventurous and uncomfortable living are not their only qualifications. These men and women have brought to this work the finest specialized education, including knowledge of Semitic and other languages of the Near East, as well as of several modern ones; a sense of universal history; a knowledge of the art and literature of Greece, Egypt, Italy, Syria, Anatolia, and Mesopotamia; and a knowledge of the Bible which goes hand

in hand with the spade. They have come with at least a working skill in the field of geology, related to layers of living; chemistry, needed in studying composition of objects; engineering; palaeontology; and ethnology. A grasp of the new marvels of microphotography, the technique of analyzing and tabulating finds, and a deep reverence for the thoughts of man and mysteries of God through millennia of time have not been lacking.

Here are only a score of the many heroes of biblical archaeology and the discoveries which make their names endure. The list includes a few scholars who, by methods far less advanced than those used for the past fifty years, nevertheless, laid foundations for the superstructure of present-day biblical archaeology. Interesting biographies of several of these are available, as *A Pioneer to the Past*, the story of James H. Breasted by Charles Breasted.

ALBRIGHT, WILLIAM F. (1891-), orientalist and Professor of Semitic Languages at Johns Hopkins University, has so enriched current knowledge about biblical archaeology through his own brilliant field work, prolific publication of books and articles, and participation in the program of the American Schools of Oriental Research that a recent volume has been written by Henry M. Orlinsky which is given over entirely to a bibliography of his writings. There are 473 items in the list. Albright was Director of the American Schools in Jerusalem at various periods from 1919 to 1936. During this time he directed excavations at Gibeon, home of Saul; Tell Beit Mirsim (probably Kirjath-sepher); and Beth-el. He participated in exploring parts of Moab and unraveling the rich inscriptions found at Ras Shamra, Canaanite culture center in north Syria. Friend of students always, he has been patient with queries of the authors of this book and has generously supplied information. There is no greater American orientalist today in the field of biblical archaeology (illus. 32).

BARTON, GEORGE A. (1859-1942), devoted lifelong study to cuneiform inscriptions which he summarized in his comprehensive *Origin and Development of Babylonian Writing*. This volume held the field for almost thirty years after publi-

cation. As Director of the American Schools of Oriental Research at Baghdad, he took active part in the exploration of Tepe Gawra and Nuzi.

BELL, GERTRUDE (1868-1926), deserves credit for founding the new Baghdad Museum in Iraq, but for much more than this. An archaeologist respected by her contemporary, Colonel Lawrence, she has left in Syria, *the Desert and the Sown* and her colorful letters of travels to places not available to many western women a unique source of information about the Near East, whose affairs she knew so intimately that for years she was adviser to King Feisal of Iraq and the administrators of this country. In shaping affairs of the new Mesopotamia this woman archaeologist, who became Honorary Director of Antiquities at Baghdad, was as unique in the twentieth century as Queen Helena in the fourth, so far as interest in landmarks of the past in ancient Bible lands was concerned.

BREASTED, JAMES H. (1865-1935), was one of the most brilliant and indefatigable American scholars in the field of archaeology and history of the Near East. Directing various expeditions to Egypt, during which he set himself the task of copying and translating all the inscriptions he could find, he collaborated with German scholars in Berlin on the difficult *Egyptian Dictionary*. He founded the Oriental Institute of the University of Chicago, which excavated in peerless fashion and with lavish funds secured by him from John D. Rockefeller, Jr., the important mound of Megiddo, overlooking the Plain of Esdraelon (illus. 21). The account in his meticulous journal of his visit to Megiddo in company with Viscount and Viscountess Allenby "of Megiddo" is a high moment in annals of biblical research in Palestine. Breasted was the first American to win European acclaim for his work in this field—even before he was fully appreciated in America. As author of many valuable volumes, including his *History of Egypt* he has put us greatly in his debt. His *Outlines of European History* (jointly with Robinson); his *Ancient Times*, which puts in fascinating array the centuries we love to study; his *Conquest of Civilization*; *The Dawn of Conscience*;

his painstaking research fruiting in the Edwin Smith Surgical Papyrus (illus. 187)—all are indications of the vast toil and versatile resources of this very great humanistic orientalist. His biography, even as written by his son Charles, does not include all the main activities of the father, not the least of whose multiplicity of tasks was the enlisting young archaeologists worthy of the generous funds available for their use. He envisioned the co-ordination of excavations on various near eastern sites in a way which would reveal the story of man's spiritual and physical progress.

In 1927 Breasted enlisted from John D. Rockefeller, Jr., \$2,000,000 for construction and maintenance of the elegant Palestine Archaeological Museum at Jerusalem (illus. 30).

CARTER, HOWARD (1873-1939), discovered the Tut-ankh-amun and other royal Egyptian treasures during five or more years of excavation in the Valley of the Kings and near Thebes. The tombs of Queen Hatshepsut and of Tuthmosis IV were discovered by him. Carter had assisted Petrie at the epochal excavation of Tell-el-Amarna (1892). Carter's campaign at Deir el-Bahri extended from 1893 to 1899.

CHAMPOLLION, JEAN FRANCOIS (1790-1832), has been called "the father of Egyptology," largely because he deciphered hieroglyphics from 1821 on. The decoding of the Rosetta Stone (illus. 31) with its memorable inscriptions in hieroglyphics, demotic (a cursive Egyptian script), and Greek, and the direction of the Egyptian Department of the Louvre in Paris are always associated with his name.

CROWFOOT, JOHN (1873-), and GRACE, are one of the numerous able couples who, like the late Sir Flinders and Lady Hilda Petrie, have enriched our knowledge of the lands of the Bible. Crowfoot was director of the British School of Archaeology in Jerusalem; he participated in digging that city's Tyropoeon Valley and churches of early date in Jerash (Gerasa) east of the Jordan. His name is best known for his finds at Samaria jointly with the Harvard Expedition. John and Grace Crowfoot cleaned countless bits of

the famous ivories of Samaria and analyzed them.

DUNAND, MAURICE, is an eminent French archaeologist, Director of the Service des Antiquités of the Republic of Lebanon, whose small but choice museum at Beirut is a great credit to this young successor of the extremely ancient Phoenician people.

DUSSAUD, RENÉ (1868-), participated in several archaeological expeditions to Syria, was Keeper of the Oriental Department of the Louvre in Paris (1928-36), and wrote volumes on Syrian and Phoenician mythology, as well as "Les Découvertes de Ras Shamra et L'Ancien Testament."

EVANS, SIR ARTHUR (1851-1941), is linked with excavation of Knossos in Crete, as Schliemann is with exploration of Troy and Mycenaean Sparta. Keeper of the Ashmolean Museum at Oxford University (1884-1908), he began investigation and restorations in Crete in 1893. The epochal discoveries he made there (at his own expense) and their light on Minoan civilization which was so influential in the eastern Mediterranean are fully treated in his four-volume *The Palace of Minos* and his other reports of Cretan archaeological research. His "hunch" to excavate Knossos began when he found one day in Athens some seal-stones with unfamiliar linear signs. Attracted to Crete to see if he might run down an earlier-than-Phoenician writing, he at last in 1900 began to dig, believing that at Knossos near the north coast of the island he might be rewarded. His fantastic hopes were rewarded by some of the most thrilling discoveries that ever fell into the hands of a brilliant archaeologist. In the first year he discovered enough of the courts and winding passages of the great palace complex of Minos to establish its identity with the meandering labyrinth famed in Greek mythology as constructed by Daedalus where mythical Theseus slew the Minotaur ("Minoan bull"). One of the finest of Evans' first discoveries was the fresco, 3,000 years old, of a Cretan youth carrying a pointed, silver-mounted cup (illus. 50). The face of the youth was so "almost classically Greek," so lacking in Semitic traces, that he gave the ex-

cavator an illuminating picture of the true Mycenaean race as it originated in Crete.

FISHER, CLARENCE S. (1876-1941), became an outstanding American authority on pottery in Palestine, leaving a monumental work in several volumes, *The Corpus of Palestinian Pottery*. Nelson Glueck calls him one of the "most original" of near eastern archaeologists, along with Schliemann, Petric, Vincent, and Reisner. We can not think of Palestine pottery without turning to Fisher, Père Vincent, and Albright. Fisher directed the Megiddo excavations in 1926 and 1927.

GARROD, DOROTHY A. E. (1892-), stands at the head of women archaeologists, especially in the field of prehistory. She "made history" by her thorough exploration and description of the Caves of Wadi el-Mugharah (see our section, Homes) on Mount Carmel, which narrowly escaped destruction during quarrying for the modern harbor of Haifa. Her work in Natufian exploration was done for the British School of Archaeology in Jerusalem and the American School of Prehistoric Research (1929-34). *The Stone Age of Mount Carmel* contains her findings. She is a professor at Cambridge University.

GARSTANG, JOHN (1876-), after excavating in "Roman Britain," participated in digs at Egyptian Abydos, the north Syrian Hittite country, and Philistine Ashkelon. But the Garstangs are best known for their patient participation in the excavation of Jericho mound, on the Jordan Plain (1930-36). Garstang's lucid volumes include one entitled *The Heritage of Solomon* and others on the Hittites and various related subjects.

GLUECK, NELSON (1900-), is a brilliant young archaeologist of the Hebrew Union College of Cincinnati, the first Jew to head the American Schools of Oriental Research in Jerusalem of which he is at present Director. Glueck is the most eminent archaeologist working today in Transjordan. His *The Other Side of the Jordan* and numerous other publications have opened up new wealth of material concerning Iron Age sites in this land east of the historic river, especially

Ezion-geber, Solomon's smelting-center port and iron-refining stronghold, (illus. 34).

GRANT, ELIHU (1875-1942), was a Quaker, Director of the Haverford Expedition to Beth-shemesh, to which the ark was carried during Israel's struggles against the Philistines. During the explorations of this campaign Grant and his colleagues found one of the famous "wedding scarabs" of Amenhotep III. The scarab announced, as Dorothy Philips of the Metropolitan Museum of Art indicates, that Queen Teye (Tiy) was the Great Royal Wife of Amenhotep III. The names of her father and mother are given—people of common birth. Amenhotep the Magnificent (1412-1375 B.C.), builder of the Colossi of Memnon, may have had no more scruples against marrying a commoner than other pharaohs of the late Eighteenth Dynasty had against introducing foreign women into their harems and foreign blood into their line of succession. The famous "lion-hunting scarab" of this same Amenhotep and Queen Tiy came to light in a shrine of the upper temple level at Lachish, frontier military post in southern Judaea.

HERZFELD, ERNST (1879-), is a gifted expert in Iranian archaeology and has published the extraordinary monuments of Tell Halâf, working out their chronology as of the last part of the second millennium B.C. He dug at Pasargadae (illus. 213) and Assur, and directed at Persepolis (1931-4) (illus. 210), later joining the Institute of Advanced Study at Princeton.

HORSFIELD, GEORGE (1882-), who had worked with the New York architect, Cram, and served in the Gallipoli Campaign of World War I, participated in repairs at Jerash (illus. 36) and was placed by the British Mandate in charge of all Transjordan antiquities (1924-36). He had the honor of making the first excavation of Petra, the rock-cut city of the Edomites and Nabataeans. His wife, Agnes Conway Horsfield, collaborates in his excavations and publications.

LIFFE, JOHN HENRY, is Keeper of the Palestine Archaeological Museum in Jerusalem (illus. 30). He helped set up its

first exhibition of treasures excavated east and west of the Jordan.

LAYARD, SIR AUSTEN HENRY (1817-94), was a pioneer excavator of Assyrian Nineveh, Babylon, and southern Mesopotamia. A large part of the vast specimens of Assyrian art in the British Museum was secured by Layard—whether we approve of such collections being taken from their original provenance or not.

MACALISTER, R. A. S. (1870-), came from the position of organist and choir-director of a Dublin church to direction of the Palestine Exploration Fund (1900-9 and 1923-4). He was a pioneer in Palestine archaeology. His excavations at Gezer and other Philistine sites have been published in careful reports. His *Century of Excavation in Palestine* tells of work done between 1824 and 1924.

MARIETTE, AUGUSTE F. F. (1821-81), a French Egyptologist, went to purchase Coptic, Syriac, and Arabic manuscripts for the national collection of the Louvre. In 1850 he made the important discovery of the Serapeum and subterranean tombs of the sacred bulls near Memphis and Saqqarah. At the request of Ismail Pasha he became conservator of Egyptian monuments and helped establish at once the Bulaq Museum, ancestor of the present Egyptian National Museum at Cairo, in which are housed the great treasures of Tut-ankh-amun and other eloquent records of ancient times in Egypt. Mariette partially explored the pyramid fields of Saqqarah, which have since been opened by expert modern archaeologists; and he did other valuable work at Karnak, Abydos, Medinet Habu, imposing Deir el-Bahri, and Tanis (biblical Zoan). The latter has within the past few years been again studied by Pierre Montet with rich finds.

MONTET, PIERRE (1885-), was Professor of Egyptology at Strasbourg University and became Director of Excavations at Byblos from 1921-24, where his discovery of the Tomb of Ahiiram, carrying the oldest then known alphabetical inscription, brought him distinction. He also excavated in Egypt (1940) the notable Twenty-first Dynasty Egyptian Tanis (biblical Zoan) where he examined the

silver sarcophagus of King Psousennes, whose body carried twenty-one gold bracelets inscribed with his family records.

PETRIE, SIR FLINDERS (1853-1942), was called by Albright the greatest genius among biblical archaeologists. This handsome white-bearded man was popularly known as "the dean of the diggers." He rounded out a remarkable life of eighty-nine years of constant activity, working fourteen hours a day, living frugally on "tins of sardines," continuing to tramp over burning-hot mounds almost until his end in Jerusalem. This giant, both physically and mentally, although too frail as a boy to have a formal education in England, founded the British School of Archaeology in Egypt and directed its excavations in Egypt and Palestine from 1880 to 1937. He did brilliant research work in the Sinai Peninsula, finding in 1904 "Canaanite-Hebrew" script at Serabit; he turned his attention in 1926 from Egypt to Palestine, digging at Gaza and Tell el-Hesi. On the latter mound he worked out in a few months in 1890 his pioneer system of reading dates by the yardstick of broken potsherds found in forgotten city levels. His subsequent "sequence dating" is used now in every near eastern dig. Leaving more than one hundred volumes, such as *Seventy Years in Archaeology*, *The Making of Egypt*, and *The Wisdom of the Egyptians*, Petrie's most famous find was the Merenptah Stele at Thebes, a stone dated c.1230 B.C. and carrying for the first time the word "Israel" meaning a people in Palestine. LADY HILDA PETRIE, his devoted wife, we have seen collaborating with him ably in their researches during their residence at the American Schools in Jerusalem. He may be excused for identifying Tell el-Hesi as Lachish, which is now known to be Tell ed-Duweir. The greater the archaeologist, the easier it is for him to change his mind upon presentation of better evidence.

At Petrie's own request his body at death was decapitated, that science might study his cranium, concerning which he had most original ideas.

RAWLINSON, SIR HENRY CRESWICKE (1810-1895), was in the van of patient translators of difficult languages of the

ancient Middle East. From the famous Behistun inscription, cut high on dangerous rock surface almost inaccessible, he deciphered Persian cuneiform in five columns each 11 ft. high, and Susian cuneiform, and a parallel record cut in Babylonian cuneiform above the other two. The rock-hewn story incised along this scarp road between Babylon and Ecbatana relates how Darius I, King of Persia, defeated rebels and restored power to his Achaemenid Dynasty. Rawlinson's pioneer work entitled him to be called "the father of Assyriology." For once he—and others—had deciphered these forms of cuneiform they could read the wealth of other records in clay and stone from Babylon and Susa.

REISNER, GEORGE A. (1867-1942), directed the Harvard-Boston Museum of Fine Arts Expedition to Egypt for many years and headed the 1908-1910 Harvard University Excavations at Samaria, whose reports are fully published. His greatest work was done excavating near the Gizeh Pyramid in Egypt, the adjoining Temple, and the Tomb of Hetep-heres, mother of Khufu (Cheops), who built the Great Pyramid in the thirtieth century B.C. His many publications and his field work entitle him to being called the father of modern archaeological methods. His training, native ability, and ample funds enabled him to revolutionize biblical archaeology.

ROBINSON, EDWARD (1794-1863), was the American father of surface exploration and biblical geography. He is noted for discovery of Robinson's Arch—the spring of a giant archway leaping out from the west wall of the Jerusalem Temple Area at its southern end to carry a viaduct over the Tyropocan Valley.

ROBINSON, GEORGE L. (1864-), is a theologian and archaeologist whose name is linked with exploration of Sinai Peninsula and Kadesh-barnea. He discovered Wells 6 and 7 at Beer-sheba and the original High Place at Petra. He was Director of the American Schools of Oriental Research at Jerusalem, 1913-14. His work is indicated in his *Edom and the Edomites* and *The Sarcophagus of an Ancient Civilization*.

SCHAEFFER, C. F. A. (1898-), French archaeologist who has directed the

epochal excavations at Ras Shamra (Ugarit) in northern Syria since 1927, found the great collection of "lost Canaanite literature" in countless clay tablets at the Royal Ugaritic Library and has published *Fouilles de Minet-el-Beida et de Ras Shamra*. In 1932-3 he directed an expedition to Cyprus.

SCHLIEMANN, HEINRICH (1822-90), once a German grocer's apprentice, has put the world in his debt for his excavation of Hissarlik on the Asiatic side of the Sea of Marmora, which he identified as ancient Troy. Although, because of his lack of scientific archaeological knowledge and equipment such as Dörpfeld and others later supplied, he was unable to identify the correct level of Homer's Troy among the seven layers of Trojan occupation, he did recover an immense hoard of golden jewelry which not only was worth more intrinsically than any other found in any other country but revealed a great civilization preceding the Hellenic. Like Evans in Crete, Schliemann at Mycenae, which he also explored, and at Troy used his private fortune. The life-story of Schliemann, merchant in indigo, is a real romance of archaeology. Albright called him a "brilliant amateur."

SHEAR, LESLIE (1880-), directed for the American School of Classical Studies the remarkable Excavation of the Athenian Agora from 1930 to its completion just before the outbreak of the World War II. In 1939 he said, "Now we have completed our work—all but erecting a museum to house our finds for posterity"! Then came the invasion of Athens. Shear also participated in excavations at Sardis and for several seasons at Corinth. He succeeded Bert H. Hill who directed the American School of Classical Studies at Athens from 1902-26 and the University of Pennsylvania Expedition to Cyprus in 1931-32 (Lepithos) and 1934 (Kourion). Like other American archaeologists, such as John Vanderpool, Hill preferred to remain in Athens during the German occupation.

STARKEY, JAMES LESLIE (1895-1938), was an able pupil of Sir Flinders Petrie. His brilliant work directing (1932-38) excavation of Lachish (Tell ed-Duweir), the frontier fortress between Palestine and

Egypt which fell to Nebuchadnezzar, brought forth, among revelations of the Marston-Wellcome-Mond organization, the noted Lachish Letters on potsherds, in script used by literate Hebrews from Moses to the Babylonian Captivity. A Hyksos fosse, temples, Egyptian jewelry, and many other treasures (illus. 244) are the result of his efforts. His tragic assassination by an Arab heated by petty feud, during Starkey's journey to Jerusalem for the opening of the new Palestine Archaeological Museum, robbed the field of a valuable expert.

STEINDORFF, GEORGE (1861-), educated at Göttingen, was Assistant Curator of the Egyptian Department of the University of Berlin, and while professor at the University of Leipzig, influenced able American scholars. He is considered by many "the greatest living Egyptologist," a great Coptic scholar, whose *Revised English Edition of Coptic Grammar* is the only authoritative grammar of the language used by early Christian Egyptians. His recent books, *When Egypt Ruled the East* (in collaboration with Seele) and *Egypt*, are notable.

STILLWELL, RICHARD (1899-), directed excavations at Corinth for the American School of Classical Studies at Athens, and assisted at Antioch.

SUKENIK, E. L., who presides over the Museum of the Hebrew University, is an eminent archaeologist and authority on synagogues in Palestine.

VINCENT, PÈRE LOUIS-HUGHES (1872-), is a distinguished French archaeologist, long resident at the French Dominican School in Jerusalem, until World War II overtook him in Paris. He is associated with the reading of Palestinian pottery and has been a congenial colleague in this field with the late Clarence Fisher and with Albright.

WOOLLEY, SIR LEONARD (1880-), has had, like Sir Arthur Evans, the rare privilege of unraveling a wholly "new" field of ancient life. What Evans did to reveal Minoan Crete, Woolley has done with Sumerian Ur, home of Abraham the Patriarch and center of the greatest near eastern culture of prior to 3000 B.C. For details of objects found in his excavation of this hoary center of worship and busi-

ness in the lowlands of the Euphrates Valley, see Jewelry, Social Structures, and Worship.

RELATION OF ARCHAEOLOGY TO THE BIBLE

Nothing that has happened in the past fifty years has put the Bible on so sure a footing as the development of biblical archaeology. Without starting out to "prove that the Bible is true," research has a posteriori come upon facts confirming and illustrating point after point, especially of Old Testament record. Higher criticism has received a blow and must henceforth be considered only in connection with the findings of archaeology. We now know that Abraham was not merely a Mesopotamian folk hero but a historic personality, probably contemporary with Hammurabi, whose date is not 2000 B.C. but between c.1728 B.C. and 1686 B.C. We now believe, with Albright, that Jericho fell later than c.1375 B.C. (Others accept 1400 or 1250). Confirmation has been found of the destruction and desertion of Shiloh by the Philistines after the battle of Ebenezer and the capture of the ark, c.1050 B.C. Exodus I has been confirmed with the discovery of Egyptian Tanis and Pithom (Tell Reta-beh), store cities of Ramesses II. The antiquity of the Song of Deborah has been demonstrated, and the pushing back of dates of portions of the Old Testament once placed in the post-Exilic period has come about. Ras Shamra in northern Syria has given us not only the lost Canaanite religious literature but has helped us construct the progress of Israel's loftier religion by tracing its steps of ascent from the worship ways of its neighbors. We know now, since Megiddo (illus. 21) and Ezion-geber (illus. 34) excavations, much about the economic foundations of Solomon's kingdom and the background of his Temple-building and chariot cities. Cross-references synthesizing Babylon with Palestinian history in the sixth century B.C. have built up satisfactory conclusions.

As Albright has pointed out in *Archaeology and the Religion of Israel*, the most brilliant and searching scrutiny of science

has not lessened the pre-eminence of the Bible as a masterpiece of literature and an absolutely unique religious document. Nothing has been unearthed which need disturb the faith of Hebrew or Christian, but much has been excavated which heightens this faith. "No major contention of Scripture has been proved un-historic."

Archaeology is an indication of the spirit of unity unfolding in Christianity. The human spirit clamors for some sort of historic foundation, some objective reality, some dependable authority upon which to build its faith. It demands truth which alone gives confidence and freedom. Archaeology, in the new evidence on the Bible which it is constantly bringing, is destined to keep the Book in its historic position of influence and power that it has had and must continue to exert in Protestant Christianity.

The Bible not only tells us of man's destiny but also reveals much about his beginnings. The eastern highlands which framed the rugged monotheism of Moses, and the caves of Carmel (illus. 136) and Galilee which saw beginnings of man's physical life in Palestine help us to set the stage on which the great drama of spiritual life developed. Palestine is the crossroad of several ancient civilizations and will continue to yield glorious discoveries in the future years of archaeological investigation. This tiny country which is the connecting link between Egypt and Mesopotamia, Syria, Anatolia, and Greece has much yet beneath its historic soil to yield to the spade of the enthusiastic excavator. Working with his Bible close at hand among his tools, he can reconstruct the era in which that book was written with an amazing superiority over the spiritual records of surrounding civilizations.

The strides of biblical archaeology have been in the direction of confirming Israelite tradition and amplifying the impression of Hebrew social and religious life we gain from reading Scripture. Sometimes these amplifications of vivid detail are startlingly interesting, as when the mosaic battle standards of ancient Ur came to light, and the still-uncoiled silver hair-ribbons of court ladies who went to their death with Queen Shub-ad 5,000 years

ago; or when the Lachish Letters from Jeremiah's time were unearthened in the guardroom at Tell-ed-Duweir (illus. 107).

SOME IMPORTANT FIRSTS

Pompeii and Herculaneum in Italy were the first Mediterranean towns to be released from their secreting layers of volcanic mud, lava, and ash. Their unearthing (1753-1939) was a first chapter in Mediterranean archaeology by other than surface-looting methods.

The first surface exploration of the Near East began about 1800, when Napoleon's expedition to the Nile (1798-9) led to the discovery of the Rosetta Stone (illus. 31) with its three languages whose decoding helped men read the ancient past of rich Egyptian life.

Greece was the first government in the ancient East to open her doors to systematic archaeology by competent foreign expeditions. In 1835 such work got under way and has continued ever since. Hence the perfection of technique we saw when conducted by a staff member of the American School of Classical Studies at Athens across the amazing dig of the Agora. With blueprint of the various temples and the public structures in hand, he unraveled what he and his colleagues had been finding (illus. 35). The same skill marks the excavations and restoration at Corinth, Samaria, Mycenae, Knossos, and the archaic-period investigation at Perachora on a headland near Corinth. Many Greek islands will yield their buried secrets of the life of men and women in ages past when world conditions permit.

The first mound in the Near East to be excavated for study was Troy, by Henry Schliemann in 1870. Troas has a New Testament connotation because of its being the point of departure of Paul on his first missionary journey to Europe (Acts 16:8).

Credit for the first scientific exploration of Palestine goes to Edward Robinson of Union Theological Seminary in New York. After fifteen years of preparation he rode over the Holy Land with a missionary, the Rev. Eli Smith, and identified most of her major sites (1838). His surface or topographical survey and identi-

fication of biblical scenes proved in most instances correct. He was also the first to record the modern Arab names of towns, which prove helpful in tracing ancient backgrounds. Robinson's pioneer work was climaxed in George Adam Smith's long popular *Historical Geography of the Holy Land*.

The first significant archaeological publication in Palestine was Lieut. Charles Warren's *Recovery of Jerusalem* (1870). This was part of the work of the Palestine Exploration Fund, stimulated by Queen Victoria, even as exploration after World War I was encouraged by Winston Churchill, according to T. E. Lawrence's *Letters*. The first great archaeological agency, the "P.E.F.," stimulated so many others from various nations that at times as many as twenty-five major digs were in progress. The P.E.F. was the first to get busy after Allenby in 1917 freed Palestine from 400 years of Turkish exclusiveness. The Oriental Institute of the University of Chicago had as many as twelve expeditions working in Bible lands at one time, under the direction of the brilliant James H. Breasted and his colleagues. Universities and millionaires blended their resources. The Bible-loving world was enriched.

John Garstang of Liverpool was the first director of the Palestine Department of Antiquities (1920). This government agency still controls excavation and grants permission to dig in this area.

Sir Flinders Petrie was the first to make a scientific excavation of a Palestinian site, when in 1890 he opened up the mound of Tell el-Hesi wrongly identified by him as Lachish, and began his remarkable science of dating layers of history by the type of pottery and other small objects embedded in ruins. He had already ended in Egypt the era of "looting disguised as archaeology."

The first American organization to stimulate excavation and publication of reports in forms accessible to the general Bible student, and to continue to describe in both scholarly and popular form current finds was the American Schools of Oriental Research, with schools and headquarters at Jerusalem and Baghdad and office in New Haven. It sponsors *Bulletins*, *Annals*, and the popular

pamphlet, *The Biblical Archaeologist*. Established in the "Grand New" but hoary old hotel in Jerusalem in 1900 with a nest egg of only \$2000, this vastly valuable organization is unique in its service. It stimulated Harvard to explore Samaria. It has taken part in excavation of Beth-el, Jericho, Tell Beit Mirsim (probably Kirjath-sepher), the Dead Sea region, the 'Arabah of Transjordan, Moab and Edom, Gibeah, Antioch, Ras Shamra, and many other notable heaps. More than fifty universities and seminaries are members in this corporation, as well as colleges and individuals. The authors of this book are vastly indebted to the A.S.O.R.

Breasted was the first to enlist vast sums from wealthy American patrons of archaeology in Bible lands. To John D. Rockefeller's munificence for the Megiddo dig, the Museum at Jerusalem, and the Oriental Institute, we have seen added gifts by other Americans and Britishers sharing their wealth, as Sir Robert Mond, Sir Charles Marston, Henry Wellcome, and Jacob Schiff. The latter donated a large sum for excavation of Samaria.

METHODS OF EXCAVATION

Once a university or museum has decided to dig on a flat-topped mound, or *tell*, which general observations from the air and exploratory trenches indicate to be a Bible site, the diggers secure permission from the government in charge—Palestine, Lebanon, Syria, Iraq, Iran, or whatever it may be. Having registered their site they buy the mound—if this expensive procedure is possible, as it was at Megiddo, where the forces of James H. Breasted, John D. Rockefeller, and the Oriental Institute of the University of Chicago combined in an ideal excavation. When mounds, or *tells*, are not purchased, arrangements are made with natives whose gardens or grazing grounds they overlook. Usually heated bargaining is resorted to, for exorbitant prices are asked. Often, after excavation and recording of all finds, the digs are covered over again and local life proceeds on sites occupied millennia before. Sometimes, as in Transjordan, a natural protective covering of drifting sand blows over and reburies what men have

not seen for centuries and may not again.

Tells are characteristic of the Middle East, where civilizations have been built on top of ruins of earlier occupations covering thousands of years. Few *tells* have been explored in Egypt, for town sites tend to be still occupied.

Able engineers lay out the entire mound in squares of twenty meters, driving in pegs at every intersection. Blueprints are made, as seen in illustration 35. Every find can thus be located by chart. Several techniques of examination are possible. Surface exploration is the most superficial and is now antiquated, except for above-ground architectural remains such as columns, foundations, city or house walls, temple altars, rock-cut inscriptions, cult pillars, etc. The *shaft method* was early used in Palestine excavations of a generation ago and still is employed for preliminary investigation. This method consists of digging a deep shaft to look into the face of layers of accumulated rubble from many layers of living in the long ago to determine whether a site is worth further exploration. The top layer may be twentieth century A.D. and the bottom thirtieth century B.C. Related to this technique is the *trench method*, which was used, for example, by R. A. S. Macalister at Gezer. This site had been located as early as 1871 by Clermont-Ganneau at Tell el-Jazari. One of the few passes to Jerusalem from the plain, it was occupied by cave-dwelling Stone Age families, Canaanites of the fifteenth century B.C., and Jews before and after the Exile. Gezer, with its *mazzeboth* (enigmatic upright stones) had an Egyptian impact always and was presented by the pharaoh-father of Solomon's wife as part of her dowry. Macalister, using the arduous trench method, with only limited Arab help, opened ditches 40 ft. wide and did remarkably well as forerunner of later scientists with better technique.

The *partial-clearance* system digs a sort of jagged layer cake, revealing parts of several levels which are studied by typical findings. This system shows up in uneven layers at Herculaneum.

The *total-clearance* technique is the favorite and most expensive. When the top levels of occupation have been re-

moved by means of little cars running on narrow-gauge tracks which slide their debris down over the edge of the mound, every minute object in the next layers is examined, listed, photographed, recorded, illustrated (illus. 35, Athens Agora). The only disadvantage of the total-clearance method is that posterity can never look at what the excavating group have been privileged to see in the way of ground plans of palaces, streets, or market places where Solomon's traders or Jesus or Paul once walked. They must vicariously enjoy it through printed volumes, pictures, and museum specimens of the main treasures. The total-clearance digs consider as stratigraphical evidence objects as sordid as broken pottery, primitive weapons, ancient bricks, shells, bones, burnt ashes; or as thrilling as hoards of gold in fabulous quantities, such as Schliemann found at Troy and Mycenae, or early gold jewelry turned up at Megiddo (illus. 156), or carved ivories at Samaria. The unwritten documents of cult figurines (illus. 49) and tools of the farmer or craftsman are as valuable as the golden mask of Tut-ankh-amun (illus. 154). To the expert in eastern languages clay tablets, such as the fabulous library at Ras Shamra or the Nuzi records provided, are a *summa bonum*.

Wise directors of an excavation bring in as much native labor as they can to do the digging. This provides income for villagers, who are a great help to the group rather than a source of annoyance. They are easily trained to dig carefully, lest frail objects be marred; to sift meticulously every yard of earth in round or oblong sieves, looking for coins, bits of metal, pottery, mosaics, etc. At the forefront of the Bethlehem Basilica of the Nativity we have watched the eastern patience of expert Arab workmen peering into their sieves for fragments of mosaics from the chancel floor of Constantine laid in the fourth century A.D. Everything found is put into flat, handled baskets for further consideration or discard. Of course, the use of native laborers involves risks. They demand payment in small cash coins, which must be brought in large amounts by the foreign staff at great risk from the nearest city. The paymaster of 400 workmen at Beth-shan was a target

for bandits en route from Haifa. Too, local or racial jealousies having nothing to do with the excavating group sometimes vent their peevishness on a director, as when they murdered one of the ablest British archaeologists of the past ten years, J. L. Starkey, of Lachish excavation. Yet the Arab foreman of the diggers may be a noble and utterly trustworthy individual, like Sultan at Lachish and Mahadin at Beth-shan, who took as great pride in protecting these digs as in trying to unravel their levels for us. They train subordinates to report as soon as their spades strike against something promising. Photographs are immediately made.

Native staffs have an attitude of superiority over foreign scholars. Lebanese using their picks at Byblos told us, "We do all the work. The French just walk around and look at charts" (illus. 37). And, of course, it is understandable that temptations to smuggle out bits of valuable treasure are too great to resist. A black market of collectors is always available to buy sherds, cylinders, papyri, or coins. No wonder Schliemann, when he stumbled upon a vast gold cache at Troy, suddenly sent all his native help home for an early meal, and with Mrs. Schliemann he dragged the lavish objects into their own house for safekeeping.

Staff living quarters for foreign archaeologists are kept as comfortable as possible. We have seen even a tin-can geranium garden maintained by Starkey's foreman at Lachish to create an illusion of coolness. A temporary museum is thrown up to house and protect valuable objects. And a laboratory for recording, photographing, and cleaning is well organized.

The transport of an archaeologist includes everything from American motor-cars to camels, horses, and the ageless donkeys of Bible lands. Little pack-donkeys are preferable to horses, for they can put off their burdens and be fed and rested at the dig rather than returned to their villages to be quartered each night. Donkeys lie wearily but resignedly on the ground, content with little food and ready to have their master lay on the burdens again in the morning. Masters treat their donkeys with a fair amount of care. They may be displaced after World War II by

discarded army "jeeps," ideal for archaeologists.

PHOTOGRAPHY AND ARCHAEOLOGY

The experts in microphotography as well as aerial photography are among the most valuable members of the group. Special types of film sealed to protect against sirocco winds and winter damp must be provided, along with other types adapted to light conditions in the Near East. When James H. Breasted in 1905 led an expedition to Egypt to photograph every known ancient Egyptian inscription along the Nile from Assuan to Khartoum, he carried thousands of glass plates 8 in. by 10 in. to record these fast-vanishing tales of past achievement. The electric flash guns used by us when we were gathering material for this book were unheard of then. Now we take two miniature cameras, a speed camera, a movie, several telephoto lenses, tripods, rolls containing hundreds of small films—all in a fraction of the space required a generation ago for archaeological pictures. Expeditions now make tiny prints of all their minutest finds and paste them on their field register where the objects are entered. An interesting account of photography in archaeological field work appears in *The Leica Manual*, 1938, from the pen of Charles Breasted.

Aerial photography is an immense aid to archaeology. Once an expedition has settled on a certain tell, or mound, as the likely site of a town mentioned in the Bible, they sometimes gain confirmation if they view it from the air. Thus they get a sense of the relation of the mound to its neighborhood, to main roads, streams, and mountains. In tracing lost Roman roads, air pictures are invaluable. The pass over Mount Carmel was verified in this manner, as it could not have been from the ground. Significant bumps and "ribs" of stone protruding from a once-occupied mound are visible from heights as they are not in a neutralizing environment. The Royal Air Force in Palestine has located several ancient town walls along roads still showing, although softened by rain, mud and debris of war. The infra-red picture

from Mount Nebo to the Dead Sea (132) is an excellent example of aerial photography.

TRIALS AND THRILLS OF AN ARCHAEOLOGIST

Conditions under which archaeology is pursued are usually so difficult that directors often regret the day they ever took it up. Contrariness of native helpers, their superstitions, inhibitions, demands for higher wages, resistance to clearing village sites still occupied, the devastating effects of blasting east winds, presence of vermin and disease germs, food and water problems, remoteness of tells from relative comforts of town life—these are the negative side of a career otherwise so fascinating that it possesses the archaeologist and ties him to his dusty digs until the last hours of his life. Thus it was with Sir Flinders Petrie, Clarence Fisher, and many another man who has preferred to end his days in Palestine rather than return to the amenities of western comforts.

Describing the devastating effects of a sirocco east wind, Nelson Glueck wrote as he journeyed recently over Transjordan mounds he wanted to excavate that the heat wave from the *khamisin* was so terrific that he slept on the roof of a mosque and was nearly blown off, yet unrefreshed. "It is on such nights that I curse archaeology and promise myself never again to venture into the field," he said. "Yet one morning dew at last fell, at the time when Arabs had anticipated it would, and the next night was actually cold." When the sirocco, or *khamisin*, gets under way, it often spreads over the whole eastern seaboard of the Mediterranean and lasts for several days. Yet when the weather clears, a poetic scientist like enthusiastic Glueck glows over the effects of moonlight on an ancient highland tell in Transjordan; the sight of the Gulf of 'Aqabah fringed with palms; the challenge of a limitless Arabian Desert; a breath-taking view from Mount Nebo across to the Dead Sea and southern Judaea, with Jerusalem dim on the rim to the north, a vista which has given us such a thrill as the wandering Israelites had when they first looked across to their Promised Land. Few other professions

amaze or reward as much as biblical archaeology, which builds up the stage of everyday living on which occurred the great revelations of religious truth. "The archaeologist," muses Glueck, "looks to the future with an eye on the past." He fills in the social backgrounds enabling men to understand better the Bible, which is essentially a theological book, inspired to set man in relation to God's will.

Possibly discouraging to patient scholars is the way archaeology has of not "staying put." Findings which have entailed almost a lifetime of research at a certain mound such as Jericho may suddenly be thrown all out of focus by a new discovery. Yet the greatest scholars have been most prompt to revise their dates and their identifications of material. Albright says that he has yielded time and again, almost to the point of being thought weak. But in this he has shown himself the truly great interpreter and teacher that he is. He has recently written the authors, "Do not venture to set a date for the fall of Jericho!"

Thus archaeology proves to be not a science of inert and wholly finished social pictures but something much alive, facing new tomorrows of historic and religious revelations.

ARCHAEOLOGICAL QUANDARIES

Should articles discovered in a dig be left in the place where they were found or taken for safekeeping to a city-center or even to a distant land which is home to the groups doing the investigation and financing it?

Certain objects are so frail—such as the ostrich fan of Tut-ankh-amun, or the gold surfacing of Queen Hetep-heres' furniture, or skeletal remains from Mount Carmel caves which were left embedded in limestone for their journey to London surgeons for analysis—that they must receive temporary "first aid." Some objects need protective coating or other treatment, lest they fall apart on exposure to air. Other extremely skillful work must be done by specialized scientists who are not on the field. Therefore, shipment is often advisable. Sometimes a division is agreed

upon, between the archaeological party from a university or a museum and the government of the country where it is digging. Such has been the case between the Metropolitan Museum of Art and the Egyptian Museum, for example, or between the Oriental Institute of the University of Chicago and Iran's Baghdad Museum. When modern Egypt became too selfish, she lost a million-dollar museum which went to Palestine (illus. 30). Iran and Iraq are equally exclusive.

Resentment over such wholesale "deportation" as Lord Elgin perpetrated with Athenian Acropolis (illus. 27) marbles has led subsequent purveyors of antiquities, even by legitimate methods, to pause. If all were left on the site where found, few of the world's people would see them. There is much to be said in favor of local museums and also of the faraway ones where utmost skill in labeling and caring for treasures is possible.

How much restoration should be practiced? The system of Sir Arthur Evans, who set up the steps and other portions of the Palace of King Minos at Knossos, using original materials as far as possible and substituting where necessary, appeals to us as desirable. Heaps of tumbled walls and columns do not help us visualize ways of living. Admirable was the restoration of the Parthenon with American funds, where drum upon drum was lifted from the ground back to its original place, with substitution of new drums only where necessary (illus. 100).

The last stage of any great archaeological excavation is the erection of an adequate museum to house its treasures. Shear had plans for building in Athens but was prevented by World War II from executing them. Museums have been erected by the Iraq government at Baghdad, by the Egyptian government at Cairo and Alexandria, and by the Lebanese Republic at Beirut. The modern Damascus Museum in Syria and the one at Corinth, the gift of an American, Mrs. W. E. Moore, are commendable. The ideal new museum in Bible lands is the Palestine Archaeological Museum in Jerusalem, a Rockefeller-Breasted gift (illus. 30). Its array of scarabs alone would repay a visit across the world. Its superb Saracenic octagonal

tower looking off to the Mount of Olives, its delectable tiled fountain court, its photographic studios, reading rooms, and exhibitions of the choicest finds excavated in Palestine and Transjordan are the last word in modern science. Fortunately for those who cannot travel to the Near East, the Museum of the Oriental Institute in Chicago, those of the University of Pennsylvania, of Princeton and Harvard; the Fogg and Fine Arts museums of Boston; the Metropolitan Museum of Art; and the British Museum—these make available more treasures than the mind can grasp. We share with you in this volume, photographs of some of these.

SOME EXCAVATED SITES SHED- DING LIGHT ON BIBLE LIFE

So many mounds have been excavated that it would be confusing and impractical even to list them in this place. Dozens of universities, governments, and museums have explored scores of thrilling sites in Palestine, Syria, Anatolia, Egypt, Mesopotamia, Greece, and Italy for more than 100 years. Their rich interpretation of everyday life of the people is suggested by material the authors of this book have incorporated into practically every section. The sites listed below can be followed in greater detail by use of the index and bibliography. William F. Albright's *Archaeology and the Religion of Israel* is so admirable and compact a statement of the minimum which biblical scholars should know in this important field that we suggest that our readers turn to this book for greater detail than we are able to bring to our section, *Archaeology*.

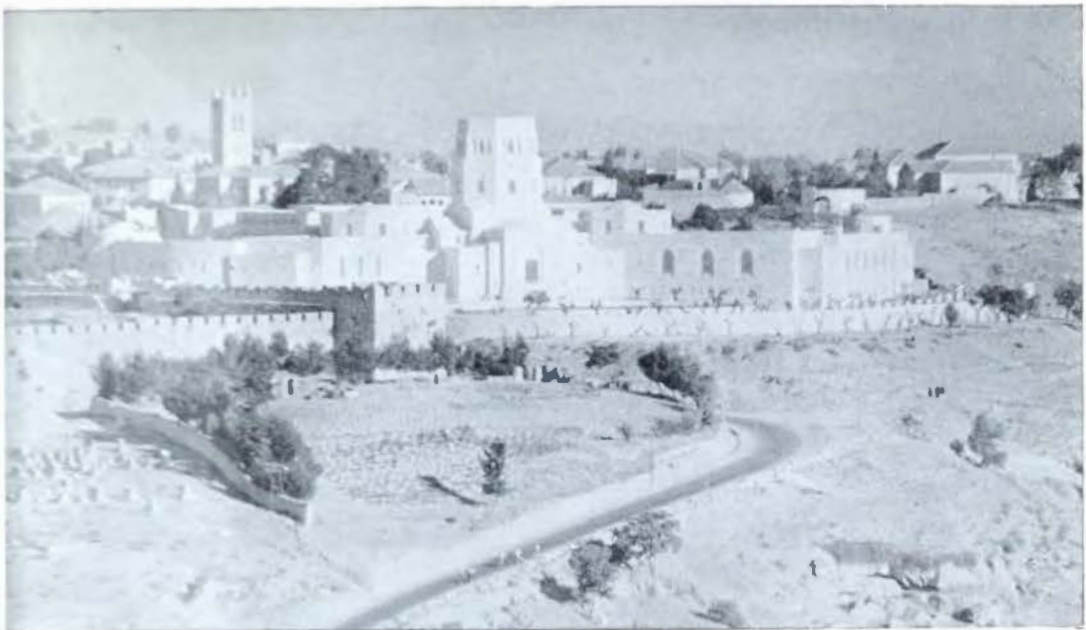
PALESTINE AND TRANSJORDAN

Ai, mentioned in Gen. 12:8 as being east of the mountain near Beth-el where Abram pitched his tent upon arrival in Canaan, was excavated by Mme. Marquet-Krause in 1933 and later. She dug down to the levels of the twenty-sixth and twenty-fifth centuries B.C., tracing ruins of 4,500 years ago, revealing a series of town walls erected 1,000 years before Abram and also vestiges of temples and palaces. This central Palestinian Ai yielded

Egyptian objects older than the First Dynasty, showing how ancient were the trade routes between the Nile and Palestine. Ai seems to have fallen to Israel between 1300 and 1250 B.C. Joshua's first spying expedition to the city was routed by the citizens (Josh. 7:2-5). But later, using ruse and ambush, he drew from Ai thousands of inhabitants and slew them in field and wilderness. We must rethink the Pentateuch statement that Ai was made a "heap forever, even a desolation, unto this day" (Josh. 8:28), for Ezra-Nehemiah lists citizens of Ai who returned from Babylonian captivity.

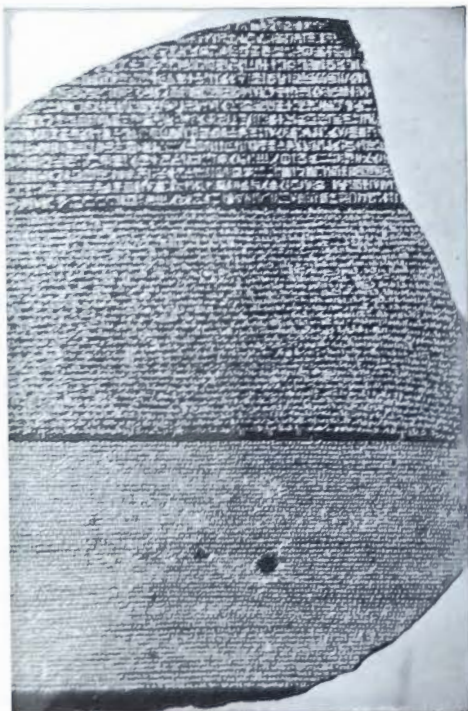
Anathoth, a city of refuge and birthplace of Jeremiah, was "investigated" by the American Schools of Oriental Research on a suggested site two and one-half miles northeast of Jerusalem. But it was found that Anathoth had changed its location, as biblical towns often did, and in the prophet's time was not where it lay in the era of Josephus. The Old Testament settlement proves to be on a fine tell 800 meters southwest, as Albright points out in the *Bulletin of the American Schools of Oriental Research*, April, 1936.

Ashkelon, one of the five Philistine cities of the plain, built like Sidon among rocks on the coast, was so strong that it was "yet to be possessed" by Joshua at the close of his conquest. It remained for Judah, aided by Kenite craftsmen (Judg. 1:18), to capture Ashkelon, together with Gaza and Ekron. These cities were tough enemies, using plain-faring chariots with iron tires. Indeed, Judah never wholly conquered these strong Philistine cities until the time of David. Little wonder that this great military king did not want the death of Saul and Jonathan to be "published" in the "streets of Ashkelon" (II Sam. 1:20) or rejoiced about among the daughters of the Philistines. The Palestine Exploration Fund located many evidences of the striking prosperity of the Philistine people, vestiges of earlier occupants, and a basilica, or place of public business, erected in the Roman age in the excellent columned style of Jerash. For Ashkelon was the birthplace of Herod the Great, who magnificently adorned it with his favorite courts and Corinthian colonnades.



30. Palestine Archaeological Museum. Northeast corner of old Jerusalem wall. Road down the Kidron Valley to Mount of Olives and Jericho. To left of the Saracenic tower of Museum is the square tower of St. George's Cathedral.

The trilingual Rosetta Stone, recording a decree in honor of Pharaoh Ptolemy V Epiphanes (205-180 B.C.) in hieroglyphic (top), demotic Egyptian or demotic script (center), and Greek (bottom). Found near western mouth of the Nile in 1799, it has served as a key to Egyptian hieroglyphic inscriptions lost since Roman days. It is now in the British Museum.



32. Dr. William Foxwell Albright, at the gate of the American School of Oriental Research, Jerusalem.





33. Column bases on the summit of the mound of Beth-shan at the eastern end of the Valley of Jezreel, commanding the pass to Valley of the Jordan in the misty distance. Excavated by the University of Pennsylvania.

34. Tell el-Kheifeh Gateway looking south, with the Gulf of 'Aqabah in background. This is Ezion-geber, seaport of Solomon (I Kings 9:26). Excavated by the American School of Oriental Research, Nelson Glueck, Director. (*American School of Oriental Research*)



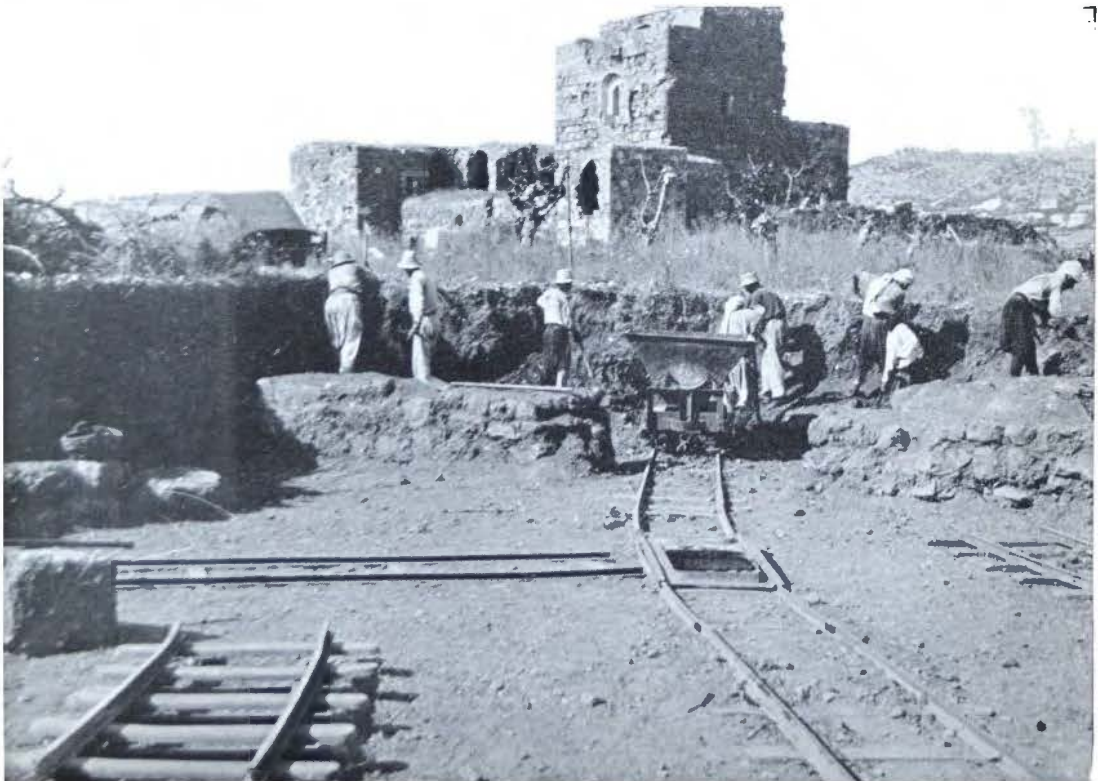
35. The Athenian Agora where Pericles and Paul walked (Acts 17:17), excavated by the American School of Classical Studies in cooperation with the Greek government. This excavation put the Theseum (Hephaisteion), best preserved temple in Greece, into its original dramatic position above the shops, commercial market, and voting-place.





36. Temple of Artemis, in Jerash, Transjordan, reveals Corinthian beauty and Roman industry on the desert's edge. Jerash was one of the cities of the Decapolis (Mark 5:20).

37. (Below) Close-up of excavation in progress at Byblos (biblical Gebal, 1 Kings 5:18), ancient Phoenician seaport, ship-building center (Ezek. 27:9), and headquarters for manufacture of writing materials from papyrus. To Byblos, we owe our word Bible ("book"). A Crusader castle rises above a layer cake of buried history.



From Jerusalem it is ten miles north to Beth-el, one of the most satisfactory of Palestine's excavations. It was begun in a fig orchard by the American School in Jerusalem, jointly with the Pittsburgh-Xenia Seminary. This Kyle Memorial excavation is on a site mentioned more frequently in the Bible than any town in Palestine except Jerusalem. Masonry of rooms and walls has been found excelling everything else of the Middle Bronze Age yet turned up in Palestine. Père Vincent calls the house walls "the finest domestic construction of this age that he has ever seen," and he has looked into the face of more Palestine excavations than almost anyone else. Remarkable drains, floor plans of chambers grouped about a court, and pavements of well-laid flags have already rewarded excavators. A native foreman, seventy-five Arab men, women, and boys, and the landowners all cooperated happily with the archaeologists. The one native who tried to make trouble was turned into an ardent supporter through free hospitalization after he was bitten by a viper.

Numerous details of this excavation on the site where "God talked with Jacob" are available in bulletins of the American Schools of Oriental Research for 1934-5, etc. The town fell to Israel in the first half of the thirteenth century B.C., as we should expect from its exposed position. It was seized by Assyria probably between 724 and 722 B.C. and, as suggested by II Kings 17:28, was partially rebuilt by Jewish priests allowed to return to rebuild the Yahweh religion in this place.

Beth-shan (Tell Hesn) is described on page 176 in *Defense* (illus. 33).

Beth-shearim, on the Plain of Esdraelon near Nazareth, where Megiddo Plain drops down to the coast, is a large recent excavation whose catacombs and pottery are notable.

Beth-yerah, a Bronze Age town at the end of the Sea of Galilee, has been found by excavation to have been a Canaanite city ("The House of the Moon") which has left extensive ruins from c.2250 B.C. Together with Jericho and Megiddo, it is among the earliest towns in Palestine.

Beth-shemesh ('Ain Shems) in the Valley of Sorek, where Samson began his

career against the Philistines and where Israelites were fatally punished for peering into the ark of Jehovah after it had been rescued from these Philistine foes (I Sam. 6:19), was excavated by Elihu Grant who found remarkable cave-tombs of c.1500-1200 B.C.; pottery; and a valuable fragment of proto-Hebrew script which, together with early Hebrew writing discovered at Lachish (illus. 70) and Megiddo, proves that Israel was using script with ink in the fourteenth and thirteenth centuries B.C. Foundations 40 ft. long, from homes of wealthy Beth-shemites, have challenged scholars. An Israelite settlement was begun here soon after the Conquest. Ruins reveal the successive stages by which the town passed from Philistine to Hebrew hands. In Solomon's well-organized economy Beth-shemesh, west of Jerusalem, was one of the twelve royal food depots supplying the capital.

Beth-zur ("House of Rock") has been excavated by the American Schools of Oriental Research and the Presbyterian Theological Seminary in Chicago. This town, "assigned" as an inheritance to Judah and fortified by Rehoboam, is seen on a hilltop as we go down from Jerusalem to Hebron. It was a fortress flanking Judaea on the west. Invaders time and again, from Philistine lords to Richard the Lion-Hearted, came up the vale of Elah defended by Beth-zur. Israelites settled down here soon after their conquest of this important height.

Byblos, one of the most famous seaports of ancient Bible lands, lies on the old Phoenician coast between Beirut and Tripoli. Under the name of Gebal, because of whom this important strip of land is called the "land of the Gebalites, and all Lebanon, toward the sunrising" (Josh. 13:5), it has been meticulously excavated by the French, under M. Maurice Dunand, whose *Fouilles de Byblos* unravel the intricacies of the layer upon layer of stones we have seen as we walked below the square Crusader Tower. Byblos merchants helped shape the destiny of Phoenicia and Palestine. Byblos ships were among the first from northern waters to trade back and forth with Egypt, although Egypt herself as early as predynastic times had

traded with the coastlands in her own vessels. Byblos papyrus-manufacturing centers furnished so many "books" from papyrus reeds imported from the Nile that the town gave its name to the Bible, meaning "books." Byblos in certain periods was dominated by Egypt.

Note the illustration, 37, of the excavation technique. The narrow-gauge railway, always a part of a good dig, is being used by Lebanese laborers who are sending away well-sorted debris. See the home-made baskets into which each bushel of earth is dumped for careful scrutiny, as these illiterate laborers hunt with great skill the scarabs, jewelry, coins, broken pottery, and variegated masonry which enable scholars to date the levels of civilization. Scholars read in priceless Phoenician ramparts, Bronze Age tombs, hoary Egyptian foundations, and tumbled Roman columns chapters from the brilliant history of this sea-king center whose golden age was 900-600 B.C. They understand how this realm of King Hiram was able to supply to Solomon for his Temple-building not only capital but great stones fashioned by the Gebalites, or men of Byblos. We have already referred to the remarkable sarcophagus of Ahiiram of Byblos with its relief of tribute bearers and its Phoenician inscription which is a link in the evolution of the Hebrew alphabet, the Greek, and our own. And in our section on Jewelry note is made of the elegant golden accessories from Byblos in the Beirut Museum.

Carchemish, a Hittite center on the upper Euphrates at the very arch of the Fertile Crescent, has been excavated, as we indicate on page 91.

Ezion-geber, the "Pittsburgh" and iron port of Solomon at the head of the Gulf of 'Aqabah, has yielded amazing information to the spade of Nelson Glueck, as we shall point out in *Business Transactions* (p. 127) and *Professions and Trades* (p. 350). For illustration of a stone gateway uncovered in this amazing smeltery town of Tell el-Kheleifeh, see picture 34.

Gaza, mentioned in Gen. 10:19, was as far back as man's memory reaches, a busy caravan city on the military and commercial highway between Egypt and Babylonia. It still is crowded with traffic, as we

have recently found when trying to photograph its main street (illus. 96). Its port, screened from the town itself by picturesque sand dunes, and its surrounding food belt made it ever coveted by Egyptians, Philistines, Babylonians, Greeks under Alexander, and Crusaders under Baldwin I. Traces of its gates, one of which the mighty Samson is credited with carrying to a hillock we have seen near Gaza, have been located. Vestiges of a Temple of Dagon, old Accad deity of vegetation whose shrine was so important in North Syria at Ras Shamra, have been excavated. This brings us close to the story of Judg. 16:23-31, where Samson tossed down temple pillars at Gaza with disastrous effect. Petrie, who dug at Beth-elgaim found what Lady Hilda describes as a portrait-head in a rubbish pile in the palace, and another rough reddish-brown pottery bit showing a woman playing a stringed instrument. Thus far these are the only identified portraits of the bobbed-haired Hyksos who flourished at Gaza. The Petries also found elsewhere the only then-known portrait of a Philistine lord, showing a hair-fringed forehead or cap, a prominent aquiline nose, large outstanding ears, short, narrow beard, and two plaited side-locks—a noble portrait of this race which terrified Israel in the days of Solomon and David.

Gezer, occupied by Canaanites and rebuilt by Solomon who received it as a wedding gift from his Egyptian father-in-law, was carefully excavated for the Palestine Exploration Fund by Macalister, who traced its story from the fifteenth century B.C. We refer to some of the findings on page 428.

Gerar, to whose Philistine sword furnaces we shall refer (Defense, p. 186), has yielded valuable pottery models of the iron-shod chariots of 970 B.C. which terrified Israel in the time of David.

Gibeah, founded soon after the Hebrew conquest, became the fortress of Saul, referred to on page 175.

The excavations at Jerash in Transjordan between Irbid and Amman, represent a major feat of the American Schools of Oriental Research, Yale University, and the British School of Archaeology, with George Horsfield playing a large role in

directing. Winston Churchill was one of the first to stress the importance of preserving such ruins as Jerash.

This "City of a Thousand Columns" was one of the ten Greek cities of the Decapolis League. It lies out on the desert's burning edge, in an oasis of the "Golden River" of the Graeco-Roman Age. It gives an amazing picture of this era when the Graeco-Roman world was clutching the rich trade routes from Arabia and adorning outpost cities with lavish architecture. This Pompeii of the East, with seventy-five tall columns still standing on its long straight main street whose chariot-rutted basalt paving we walked one sunset hour; and with fifty-seven columns from the once-busy forum still casting late-afternoon shadows over the trading place, gives us an idea of the appearance of a city which was still under construction in the time of Jesus.

Gerasa, or Jerash, has left hillside theatres and temples more extensive than even the remains of ancient Athens, and a triumphal arch bears a superb inscription now pieced together to tell its story of dedication in A.D. 192 by Agrippa. The tangled complex of Jerash temples enables us actually to trace the downfall of the pagan and the birth of Christian worship places. For in the stately stepped propylaea of the Temple of Artemis (illus. 36) and its neighbor, the Church of Theodore, we picked up mosaic fragments which felt like links between two orders of faith. The Propylaea Church of Jerash, says Crowfoot, definitely shows incorporation of a classical-period building into a Christian church. A classical gateway was built into the apse; and street columns were incorporated into the fabric. A priceless inscription refers to the dedication of the classical structure to Fuscianus, Governor of Arabia and consul c.187 B.C.

Jericho (Tell es-Sultan), whose walls fell inward at Joshua's conquest after the Jordan had been crossed, is referred to elsewhere in this text (see Index). Its tedious, satisfactory excavation, first by Germans, then by British and Americans led by John Garstang and W. F. Albright, has revealed rich knowledge of this "most ancient of Bible cities." Jericho, on its tiny walled mound opposite the timeless

and still flourishing spring on the level Jordan Plain (illus. 122), has always been populated. Prehistoric people lived there before homes were built. Some of Jericho's ashes and a fragment of its tell-tale pottery lie before us on the desk where we are writing these pages. Our tramp down over the eloquent layers of houses, poorly built fortifications, and storage places still holding grain left there millennia ago was a memorable high spot of our travels in Palestine. Dates for the fall of Jericho to the Hebrews have been debated so hotly that we prefer not to suggest a definite one.

Kirjath-sepher (probably Tell Beit Mirsim), called "the City of the Book" has yielded few written records. But, as C. C. McCown points out in *The Ladder of Progress in Palestine*, it shows clearer stratification than any other Palestinian excavation. It lays bare masonry from Egyptian, Hyksos, and the Hebrew invasion under Joshua and indicates Jewish residence until almost the Exile in the sixth century B.C. Its silos, casemates, poor quality of pottery, defense walls, and birth-charm figurines in clay have brought life to the records of Josh. 15 and Judg. 1, recording the capture of this royal Canaanite city by Othniel, who became judge of Israel. Reports of excavation by the American Schools of Oriental Research and Xenia Theological Seminary offer revolutionary information about processes of pottery-making in early Israel. Albright suggests that the dye vats, loom-weights, and house plans indicate an organized trade-guild activity of cloth merchants here. Settlement by wandering Israel seems to have begun soon after they had seized the town.

Lachish (Tell ed-Duweir) is described in *Defense*, page 177 (illus. 244).

Megiddo (Tell el-Mutesellim) reveals one of the finest pieces of biblical archaeological research in Palestine. (See pp. 173, 177, *Defense*, and illus. 21.)

Moab excavations have included not only the Moabite Stone but also the discovery of early Christian church foundations on Mount Nebo, from which Moses viewed the superb panorama at which we have marveled, looking down on the Dead Sea—the entrance of the Jordan into this

weird water; and, on the distant rim of the horizon, Jerusalem, alluring as a misty mirage (illus. 132, and Geography, p. 229). No wonder Moses longed to possess this land of his dreams. The ninth-century-b.c. Mesha Stone records how one Moabite king seized Nebo and satisfied blood revenge by killing "seven thousand men, boys, women and girls" of Ataroth, an Israelitish settlement, and dedicating his prey to Ashtar-Chemosh. To Nelson Glueck, Director of the American Schools of Oriental Research at Jerusalem, we are indebted for reports of his excavations all up and down Transjordan, from the northern boundary to the Gulf of 'Aqabah. He has pioneered in a new field of biblical archaeology shedding light on Israel's wanderings and arrival in eastern Palestine. His Iron Age sites, detected by tell-tale pottery, are enormously interesting, as discussed in *The Other Side of the Jordan* and his letters.

Albright maintains that the "first territory to be conquered by the Israelites in Transjordan was the kingdom of Sihon, in the region north of the Arnon, around Heshbon" and Madeba. Visiting the latter, we have realized the difficulty of digging through such an ancient occupied site without elaborate excavations. Scholars tingle to "get at" this place of sedentary occupation probably used by Moses soon after the Exodus.

Petra in Transjordan has been excavated by numerous great scholars. The "Conway High Place" at Petra, excavated in 1934 by Mr. and Mrs. Horsfield for the Melchett Expedition in collaboration with Albright and others, has been reported in the publication of the *Melchett Expedition to Petra*. George Robinson has made a fine contribution to reports of the Petra High Place in his *Sarcophagus of an Ancient Civilization*.

Mizpah (excavated 1926-31) has revealed by the spade an Israelite gateway in this place where Saul was crowned king—interesting as a link with the beginning of the Hebrew monarchy.

Mount Carmel (see p. 235, Homes, and illus. 125.)

Samaria and its important excavations by Harvard University, the Hebrew University at Jerusalem, and the British School

of Archaeology are referred to on page 98 (illus. 212).

Shechem is mentioned in *Cities, Towns, Villages*, page 156.

Tabgha on the Sea of Galilee, has yielded beautiful finds described on pages 320-21.

Ras Shamra (Ugarit) in northern Syria has yielded treasures of unguessed cultural and religious significance. Reference to this excavation by Schaeffer is made in *Social Structures, and Worship*.

LATENT ARCHAEOLOGY IN BIBLICAL ASIA MINOR

Excavating the mount of Mersin, twenty-five miles west of Tarsus, birthplace of Paul, Garstang at the age of sixty years dug from 1937 on, with marked success. In this key harbor position controlling routes east and west, connecting Carchemish and Aleppo with western Anatolia by way of the easy pass of the Taurus Mountains over the Pisidian Highway, he found at Mersin a unique deposit of ancient culture. Probably Paul saw the glowering mound of this ancient pile of history. Garstang found strong ramparts of the Hittite-culture period (c.1900-1200 B.C.) and also evidences of domestic units, with grain bins, grindstones, fireplaces, and cook-pots from the period between 4000 and 3000 B.C., as described in *The American Journal of Archaeology*, January, 1943.

Rich remnants of the material prosperity of the main cities of Asia Minor through which Paul traveled and where he planted Christian seeds are extant. A limited amount of excavation has been carried on, but huge funds are still needed, such as Rockefeller supplied for Megiddo in Palestine. The Turkish government has a deep pride in its monuments of Hittite and Graeco-Roman cultural deposits. It guards what is above ground (illus. of Hittite sphinx now at Ankara, 43). It treasures its greatest Greek temple, at Didymion south of Ephesus, because of its solemn beauty and its ministry long ago to King Croesus. But thus far Turkey has had too many current problems building a modern nation to spend resources digging into past glories. These mysteries have

waited for millennia and will keep a few years longer.

However, the three chief cities of Asia Minor in Paul's time—Ephesus, Pergamum, and Smyrna, deadly rivals along trade routes to the Aegean from the rich mineral-stocked mountains of the hinterland—offer typical archaeological matter.

Ephesus, capital of the Roman province of Asia, was an ancient Ionian city commanding the Cayster River valley and accessible to the other important valleys, the Hermus and the Maeander. It was partially excavated for the British Museum long ago (1863-74) by an architect, J. T. Wood. Again in 1904 this Museum sent out D. G. Hogarth, who discovered the rare genius of T. E. Lawrence and served as director of excavations of Hittite Carchemish. Hogarth found the famous foundation deposits of the Temple of Diana in one of its lower levels. The Austrian Archaeological Institute has also dipped into the amazing remains of Ephesus, whose market places and especially the theatre which succeeded the one where Paul was the center of a mighty tumult (Acts 19:29,31) are of tremendous interest. Under Worship, see the illustration, "Diana of Ephesus." John of Ephesus mentioned this city first among the Seven Churches of his Apocalypse (Rev. 1:11).

Pergamum, another Asiatic city which felt an early Christian impact was the capital of a rich area including Lydia. The Greek Theatre of Pergamum offering hill-side seats for 3,500 spectators who came to the health-giving springs of this wicked resort is mentioned in Rev. 2:12 and 13. It has an acropolis, like Athens and Corinth, crowded with public buildings, altars, terraces, and even a library (see Social Structures, p. 384). Pergamum awaits a financial sponsor and a modern archaeological expedition. The altar, "Satan's Seat," has been removed intact to Berlin Museum.

Sardis, once capital of rich Croesus, king of the Lydians, controller of metal mines from which the first money was minted in the ancient world, has imposing columns from the Roman period towering against a massive backdrop of Anatolian mountains (illus. 99). On the imposing highway from the interior to the Aegean, Sardis commanded the productive plain of

the Hermus River. Its riches were inevitable and doubtless when archaeologists dig below its surface, they will greatly enrich our knowledge of the Asia in which Paul and John of Ephesus lived. Several Americans have attempted to excavate Sardis. But the tremendous funds necessary have not been forthcoming. The site would richly reward a properly equipped expedition. Schliemann, excavator of Troy, realized the money needed for this task.

Smyrna, one of the greatest cities of Asia Minor in antiquity and still strategic, has fortress ruins from an early date which still awe their beholders. They glower on a hill in the pass between Smyrna and Nymphi. This city, too, has an acropolis, called "the crown of Smyrna," with the usual temples and defense walls. Racial struggles between Greeks and Turks at Smyrna in modern times have been more conspicuous than international cooperation in excavating this very important city center having a long Christian history. A Roman aqueduct near this site once carried water to a civilization as crowded as modern Germany.

BABYLONIAN AND ASSYRIAN REVELATIONS

Babylonia and Assyrian excavations loom on a gigantic scale. Reference is made to those at Ur on pages 273 and 275, and at Mesopotamian Tepe Gawra on page 378. This latter city, whose impressive mound has already yielded much light on life in ancient times, was abandoned before the era of Abraham, when it was 3,000 years old. Illustrations showing the Tower of Babel, vestiges of the famous Ishtar Gate excavated at Babylon, and the amazing architecture of the Audience Hall at Persepolis appear in illus. 22 and 210. Many expeditions have been sent out by the Oriental Institute of the University of Chicago. For their discoveries consult reports of work at Persepolis, Khorsabad, Nineveh, Nuzu, Mari on the upper Euphrates, Assur, and Susa. The finding in 1933 of the records of Darius the Great on a huge tablet of solid gold and a duplicate in silver in the foundation deposits of his Audience Hall at Persepolis was worth the labor and wealth poured out

by backers of the Oriental Institute. The rock-cut, empty tomb of Darius and Artaxerxes of the Queen Esther narrative loom impressively in the aerial photographs which have been widely used in the Oriental Institute's excavations. The Tomb of the Persian King Cyrus the Great, so clement to exiled Jews (II Chron. 26:22), is pictured in illus. 213 of this book. It is at Pasargadae, northeast of Persepolis.

For the excavations of the University of Pennsylvania Museum in collaboration with the Oriental Institute in the old river valleys where man's earliest act in the drama of civilization was set possibly (c.4000 B.C.) consult the Tepe Gawra reports (illus. 208) of these bodies. Further information may be obtained from records of the American Schools of Oriental Research at Baghdad, the Gertrude Bell Fund of the British School, and those of the Iraq government explorations. A picture of jewelry found at Tepe Gawra appears in illus. 155.

A GLIMPSE AT EGYPTIAN BIBLICAL ARCHAEOLOGY

Systematic excavation of richly revealing sites in Egypt got under way long before Palestine and Syria were being scientifically studied. Elsewhere in this book are numerous references to discoveries made in that ancient land. Tanis and other store cities of Ramesses II may contain work of conscripted Egyptian brick-makers, as related in Ex. 5:10-14. Amarna (Akhctaton), new city of the young monotheistic reformer, Akhenaton, lies on the Nile halfway between Cairo and Thebes. There is the superb complex of temples and tombs at Deir el-Bahri, much of which was constructed by the early feminist, Queen Hatshepsut; her expeditions to Punt in tropical east Africa (c.1504-1482 B.C.) remind us of the luxury-seeking cargoes of Solomon four centuries later. The stepped Pyramid of Saqqarah and the temples; the great Pyramids of Khufu, Khafre, and Menkaure in the Fourth Dynasty and the surrounding terrain; the Valley Temple; the mastaba tombs and small pyramids excavated by George Reisner at Gizeh; the important work of German archaeologists at Gizeh, as well as recent excavations

conducted there by the Egyptian Antiquities Service; the Heliopolis obelisk, which must have been familiar to Moses; the banquet customs of Joseph's day at the court of Pharaoh—these and many other illuminating features of Bible life in Egypt have been revealed by archaeology. The numerous references to them in the pages of this volume may be located through the Index.

Readers of this book would do well to look up descriptions of excavations at Amarna, which is linked to biblical history through the famous letters written between vassal rulers in the Middle East and their Egyptian overlords c.1400 B.C. An excellent description of the new capital at Amarna is included in *When Egypt Ruled the East*, by Steindorff and Seele, Chapter 14. Under the spade of excavators this city has yielded fascinating glimpses of the court life of young Akhenaton, his little wife Nofretete—whose well-known bust is one of the rare art gems from antiquity, and their several small daughters in the City of the Horizon of Aton. The Great Temple of the Sun's Disk; the Great Hall of Foreign Tribute; the Queen's Quarters in the North Suburb; the Workmen's Village at the south end of Amarna, all reveal Egyptian customs as they persisted through centuries of influence upon Palestine. For the treasures of King Tutankh-amun see *Jewelry*, page 276. Consult also Section 5, Arts and Crafts, for revelations of Egypt.

SOME GREEK EXCAVATIONS

Greece, first Mediterranean country to welcome exploration of her rich ancient sites by foreign scholars, has opened many pages of life during her golden centuries at Athens, Corinth, Eleusis, Delphi, Mycenae, and many other sites. For the sake of Paul we refer under Arts and Crafts and Business Transactions to the excavation of the Athenian Agora and the great port of Corinth, where the Apostle lived for as much as eighteen months at a time. Numerous other allusions to archaeological discoveries in Greece are listed in the Index. These include Greek colonies at Paestum in southern Italy (illus. 241). Under Worship we offer material about

Professor Maiuri's excavations at Cumae in Italy which help us to appreciate better than ever before Virgil's great epic of the pious Aeneas and his father who sailed from Asia Minor to found the Italian people; and which help to trace from pagan temples the trail to ancient Christian churches in this superb high place north of Naples.

BIBLICAL ARCHAEOLOGY IN ITALY

Our pictures of Paul's Appian Way (illus. 202), of the Forum (81) and Mamertine Prison (215), and of the obelisk at St. Peter's Square help us to visualize scenes in the lives of these two great founders of Christianity. For illustration of the early Greek structures at Italian Paestum, see illus. 241. And for a glimpse of the Roman imperial pantry and port of Ostia, as revealed by Amedeo Maiuri's fine archaeological staff on the eve of World War II, see illustrations 193 and 203. His records of excavations at Pompeii, Herculaneum, and Cumae also are notable.

Modern methods of excavation at the aristocratic seaside town of Herculaneum show the jagged layer cake beneath the modern town of Resina and the smoking cone of Vesuvius which destroyed the elegant little town in A.D. 79. Its streets, shops, and villas show us the type used in Italy during Paul's sojourn in the first century.

ARCHAEOLOGY AND PEACE IN BIBLE LANDS

In the midst of world conflict in 1943 archaeological conferences were held in England and Palestine. The group in Palestine, called together informally by Nelson Glueck, considered a code for postwar policies in Bible lands which had been drawn up as agenda in a letter written by John Henry Iffie, Keeper of the Palestine Archaeological Museum. It calls for co-operative efforts of various nations under the authority of the United Nations; the abolition of secret reports; and permission of exclusive governments such as Turkey, Italy, Egypt, and Iran—who have driven out groups of valuable scholars—to further

international efforts for the recovery of past civilizations which may contribute to our present living.

Such a postwar archaeological code will have to be acted upon internationally. No time can be lost in preserving antiquities in Cirenaica (illus. 97), Tunisia, and other parts of North Africa and the Mediterranean which have been involved in war. The writers of this book hope that provision will be made for foreign archaeologists to lecture in American colleges and theological seminaries, with countless pictures to unfold the ways of life in the ancient lands which gave us our Bible.

Biblical archaeology is so well organized that even in times of world conflict a few scholars remain on the job. Egyptian scholars have continued working even during World War II. Native workmen guarded the property and expedition house of the Metropolitan Museum of Art while exploration was suspended.

In 1942 at Tell 'Uquair, in southern Iraq not far from Ur, the Iraqi Department of Antiquities unearthed a complex of temples built in next to the oldest period of all Mesopotamian occupations of which we have vestiges. In this Uruk level were found painted pottery, the earliest known wall frescoes, and a definite ancestor of the ziggurat, or artificial raised temple platform. Meantime, over in the Republic of Lebanon, at the point where we have usually seen flocks resting where the Dog River flows into the Mediterranean, the massive statue of a wolf was found—traditional guardian of this Highway of the Conquerors through the Litani Valley (illus. 200). This same year, 1942, witnessed the ingenious work of the Oriental Institute of the University of Chicago in Iran, evolving a sequence of dates for the pre-Saragid temples in late pre-historic and early historic Mesopotamia.

Accidental finds in military construction during war years always turn up valuable material, as was the case with a section of 7-metre-wide Roman road found in the Tyropoeon Valley of Jerusalem and a Roman sewer outside the Dung Gate. British troops digging near Cairo found in 1942 a valuable mosaic floor. Engineers constructing the new railroad from Haifa to

Tripoli in Lebanon stumbled upon some rare Phoenician glass near Byblos, one of the first glass-manufacturing centers of history. Coins and potsherds *ad infinitum* keep bobbing up.

At the December, 1943, meeting of the New York Society of the Archaeological Institute of America in the Metropolitan Museum of Art, Karl Lehmann described "one of the most important discoveries ever made by archaeologists on antique soil"—the Greek temple on the River Sele, between Salerno and Paestum, where a fierce battle occurred during the 1943 Allied landings in Italy. The temple, which had been under active investigation when the war began in 1939, was unscathed by modern warfare. Discovered in 1934 by Mme. Paola Zankani and a colleague, it remains as a unique specimen of early Greek art, dating from c.570 B.C.

A yearbook of the German Archaeological Institute in Athens for 1941 reveals that work was being carried on at Olympia and Delphi in Greece. New discoveries gave material for a complete history of Greek armor from the days of Homer, and of the tripods awarded as prizes in athletic contests. Trophies consisting of shields, helmets, greaves, etc. taken in battle and offered to the gods, were reported found.

War-lulls enable language scholars to continue deciphering the mass of clay tablets and cylinder inscriptions which wait by thousands for translation. Samuel Kramer of the University of Pennsylvania in 1943 brought attention to what he thinks is man's earliest concept of world peace, on a cuneiform-inscribed clay tablet written probably c.2000 B.C., more than a thousand years before the famous Hebrew prophecy of c.800 B.C. concerning the

beating of "swords into ploughshares." The poem, in the past tense, paints a utopia where there was freedom from fear and freedom from want—a golden age with a universal language and a universal religion but an age impossible of future attainment.

"Archaeology," says John A. Wilson, Director of the Oriental Institute, "is a precision tool for the hand of the expert. It aims to 'increase our knowledge from more to more that life may be enriched.' Yet it must not be merely record and catalogue. It must enable even the man who runs to read the story he longs to read—the story of man through the ages, man not only in one time and place, but as a consecutive movement. Only as archaeology speaks in terms meaningful to the lay public will it enable society to climb into its car with it and go traveling to new frontiers of research."

The labor of any exhausted archacologist would seem to him worth while if he could cavesdrop, as we did one day in the University Museum at Philadelphia while two ten-year-old urchins halted before the cases where Sumerian clay business tablets, syllabaries, and other literally dry-as-dust stuff held them captive. They were gripped by an incoherent sense of their being in some way linked up with these vestiges of everyday living as they exclaimed, "Whew! did they have to study grammar five thousand years ago, just as we do now? And arithmetic, too?"

It is our hope as authors, that this book with its many illustrations may help readers to walk in the streets, cat in the homes, and worship in the temples of men and women who lived in the lands where our Bible was worked out through ten or more centuries.

BIBLIOGRAPHY

- Such journals as the following will be useful:
American Journal of Achaeology, Archaeological Institute, Columbia University, New York.
Journal of Near Eastern Studies, University of Chicago Press, Chicago.
Journal of the American Oriental Society, Baltimore.
Bulletins and Annals of American Schools of Oriental Research, New Haven.
Journals and Bulletins of the University Museum, Philadelphia.
Berytus, a periodical on Archaeology in Syria, American University, Beirut.
 Albright, William F., *Archaeology and the Religion of Israel*, The Johns Hopkins Press, Baltimore.
 ———, *Archaeology of Palestine and the Bible*, Fleming H. Revell Company, New York.

- Albright, William F., *From the Stone Age to Christianity*, The Johns Hopkins Press, Baltimore.
- Breasted, Charles, *A Pioneer to the Past*, Charles Scribner's Sons, New York.
- Breasted, James H., *Ancient Times*, Ginn and Company, New York.
- Burrows, Millar, *What Mean These Stones?* American Schools of Oriental Research, New Haven.
- Caiger, Stephen L., *The Bible and the Spade*, Humphrey Milford, London.
- Chiera, Edward, *They Wrote on Clay*, University of Chicago Press, Chicago.
- Childe, V. Gordon, *New Light on the Most Ancient East*, D. Appleton-Century Company, Inc., New York.
- Dunand, Maurice, *Fouilles de Byblos*, Geuthner, Paris.
- Fisher, C. S., *The Excavation of Armageddon*, University of Chicago Press, Chicago.
- Frankfort, Henri, *Archaeology and the Sumerian Problem*, University of Chicago Press, Chicago.
- Garstang, John, *The Heritage of Solomon*, Willams, & Norgate, Ltd., London.
- , *The Story of Jericho*, Hodder & Stoughton, Ltd., London.
- Glueck, Nelson, *The Other Side of the Jordan*, American Schools of Oriental Research, New Haven.
- Gordon, Cyrus H., *The Living Past*, The John Day Company, New York.
- Graham, William C., *Culture and Conscience*, University of Chicago Press, Chicago.
- Haverford Symposium on Archaeology and the Bible, American Schools Oriental Research, New Haven.
- Jacobson, David, *Social Backgrounds of the Old Testament*, University of Cincinnati Press, Cincinnati.
- Kenyon, Sir Frederick, *The Bible and Archaeology*, George G. Harrap & Co., Ltd., London.
- Kraeling, Carl H., ed., *Gerasa, City of the Decapolis*, American Schools of Oriental Research, New Haven.
- Macalister, R. A. S., *A Century of Exploration in Palestine*, Fleming H. Revell Company, New York.
- Manson, *A Companion to the Bible*, T. and T. Clark, Edinburgh.
- Marston, Sir Charles, *The Bible Comes Alive*, Eyre and Spottiswoode, London.
- Mathews, Basil, *The World in Which Jesus Lived*, Oxford University Press, Oxford.
- McCown, Chester C., *The Ladder of Progress in Palestine*, Harper & Brothers, New York.
- Murray, Margaret, *Petra: The Rock City of Edom*, Blackie & Son, Ltd., London.
- Petrie, Sir Flinders, *Syria and Egypt from the Tell el-Amarna Letters*, Mathews, London.
- , *The Wisdom of the Egyptians*, British School of Archaeology in Egypt.
- Petrie, Lady Hilda, *Sidenotes on the Bible*, Hutchinson & Co., Ltd., London.
- Robinson, George L., *The Bearing of Archaeology on the Old Testament*, American Tract Society, New York.
- Schaeffer, Claude F. A., *The Cuneiform Texts of Ras Shamra-Ugarit*, Humphrey and Milford, London.
- Schmidt, Erich F., *The Treasury of Persepolis* (pamphlet), University of Chicago Press, Chicago.
- Steindorff, George, *Egypt*, J. J. Augustin, Inc., New York.
- Steindorff, George, and Seele, Keith, *When Egypt Ruled the East*, University of Chicago Press, Chicago.
- Trumpet, Victor, *The Mirror of Egypt in the Old Testament*, Marshall, Morgan and Scott London.

ARTS AND CRAFTS

Jehovah . . . called Bezalel . . . and . . . filled him with the Spirit of God . . . to work in gold, and in silver, and in brass, and in cutting of stones for setting, and in carving of wood.

—Ex. 31:1-5

Introduction	Gold and Silver Work
Hebrew Apathy to Art in Bible Times	Ivory, Ebony, and Alabaster
Primitive Art-finds in Palestine	Megiddo, Samaria, Syria, Egypt, As-
Cultic Figurines, Sculpture, and Pottery	syria
Terephim, Amulets, Shawabti	Lamps
Architecture	In Jerusalem Worship
Sumerian and Later Mesopotamian Currents	In Peasant Homes
Egyptian Architectural Influence on Palestine	Types of Lamps
Hebrew-Phoenician Architecture	Antioch Yields
Solomon's Temple and Palaces	The Corinthian Collection
Synagogues	From Ur, Egypt, and Pompeii
Roman Architecture in the Land of Jesus	Metal-Art Work
Samaria	Mosaics
Jerusalem and Herod's Temple	Sumerian, Galilean, Transjordan, Con-
Triumphal Arches	stantinian, Syrian, Persian
Graeco-Roman Jerash	Pottery
The Roman Temple-complex at Baalbek	An All-Mediterranean Art
Greek Architecture in Bible Lands	Arrival of the Potter's Wheel
In the Time of Paul	A Family Pottery Cooperative
In the League of Ten Greek Cities	The Kerameikos, or Potters' Section
In Transjordan	National and Regional Records in Palestine
Hittite Architecture in Temple	Pottery
Fresco Painting	Tile Ceramics
Palestinian	Sculpture
Cretan	Stone Figures
Roman	Stone Reliefs
Egyptian	Sculptured Sarcophagi
Art Furniture	Weaving
Egypt, Jerusalem, Minoan Crete, Samaria	Additional Bible References
Glyptic Art	Bibliography
Glass	
Egyptian, Phoenician, Roman	

INTRODUCTION

HEBREW APATHY TO ART IN BIBLE TIMES

Except in music, literature, and "graving"—which included carving of gems and several other art crafts—Hebrews of Bible lands were not especially skilled in the fine arts or primarily interested in them.

Their penchant was toward establishing a homeland where they could develop their genius for a monotheistic religion. Their arrival in Palestine after years of Bedouin life in deserts south and east meant a retrograde influence upon the already existing art which Canaanites and Amorites had developed with notable skill in the Bronze Age. Some historians go so

far as to claim that the decline in pottery and architecture which paralleled the coming of the Hebrews was comparable to the invasion of river valleys of Italy and France by northern barbarians, Goths and Vandals.

Together with absence of pottery aptitude and construction skill always accompanying tribes which find goatskin bags safer water containers than earthen pots and pitched tents more adequate homes than stone houses, the early Hebrews displayed a solemn inhibition for all sorts of representational art. We wonder if their commandment against graven images of things "in heaven above" was a protest against worship of celestial bodies by moon-and-star-loving Mesopotamians; and against things "in the earth beneath," was a renunciation of the serpent cult long popular in Syria.

At any rate, Hebrews' apathy toward the arts is responsible for their having left us no choice paintings comparable to the frescoes of Minoan Crete (illus. 50); no great sculpture such as the Egyptian statue-portrait of Tuthmosis III (illus. 42); and no golden cups such as Schliemann brought from his Greek excavations. Even in architecture they borrowed the pattern for Jerusalem's Temple of Solomon's time from Phoenicians (illus. 60). Herod's Temple followed specifications of Graeco-Roman architects and artists. Even the versatile craft-skills attributed to Bezalel of the tribe of Judah were exercised in the period just after Israel's exposure to Egyptian art influences during their sojourn in the Delta. The so-called "bell-and-pomegranate" motif used in decorating the Temple turns out to be the Egyptian lotus-and-bud design, used in the Luxor Temple. The motif of the "great golden vine" in the Herodian Temple was of Mesopotamian origin. Syria, too, left deep imprint on the art of Palestine, as we learn from matter excavated at Ras Shamra. Not only the architecture but the ritual of the Hebrews was markedly influenced by Ugaritic practice. The very date of the Temple dedication during the autumn Feast of the Tabernacles when libation water was plentiful seems to correspond to the Canaanite custom at Ras Shamra, as René Dussaud has suggested.

But even if Hebrew city-builders were not great artists themselves, they knew where to turn for the best neighbor-craftsmen of their day. David and Solomon both allied themselves with King Hiram of Tyre, whose subjects were famous for ability in architecture and art metal work for Temple equipment; in cedar-wood interiors; and in preparation of decorative fabrics. Too, Hebrews appreciated the beautiful wares of surrounding nations met in their trading adventures, their travels, and their participation in war. Bazaars were always stocked—even as they are today in Palestine, Syria, and Egypt—with fascinating art objects filtering in over caravan routes (and now motor and air highways) from Asia Minor, Assyria, Mesopotamia, Egypt, the Aegean, and farther west. At such dominating centers as Beth-shan, Megiddo, Samaria, and Lachish, rich conglomerations of scarabs, cult shrines carved with human "masks" or serpents, rings, artistic arms, amulets, and coins have come to light, showing a wide variety of provenance.

Therefore, even if we cannot find Hebrew treasures in the plastic arts, we are finding more and more texts and light on their great gifts to the world in religious literature. Hebrew laborers working at the famous turquoise mines at Serabit in Sinai Peninsula were not interested in producing necklaces and inlaid table art such as Egyptians created. But, inspired by Egyptian possession of an art of hieroglyphic writing, they were interested in beginning to work out here a language in which they could express their thoughts about God. And even if they left us no breath-taking canvas of the Plain of Esdraelon in lily-of-the-field time, and no tapestry showing the heights and depths of sublime Wadi el-Kelt with its silver waterfall, they did fashion the topography of their weirdly beautiful little land into such expressions as Isaiah's "flower of the glorious beauty, which is on the head of the fat valley . . . as the first ripe fig before the summer." And we have Job's artistic record of "the gold of Ophir among the stones of the rocks," and the coral, glass, crystal, and sapphire (lapis), than which wisdom is even more precious.

And it is interesting to note that when

on rare occasions the Old Testament records art-skill of an individual, it links these talents to Jehovah, still the source of inspirations of creative beauty.

PRIMITIVE ART-FINDS IN PALESTINE

One of the earliest fragments of art yet found in Palestine came to light in a cave of Wadi el-Mugharat south of Mount Carmel, during rock-quarrying for the modern Haifa harbor. This prehistoric work is a creditable bull-calf carved in bone. Other prehistoric art has been found by Nelson Glueck in eastern Palestine where on a Nubian sandstone hill, Jebel Tubaiq, at an important crossroad halfway between the Gulf of 'Aqabah and a desert oasis on the edge of Arabia at the south-east tip of Transjordan, he found scratched on rock a large ox superimposed on still earlier rock-cut pictures of ibexes and a man.

Rock-cut reliefs made c.2500 B.C. by "a Mesopotamian Gutzum Borglum" reveal what Breasted called "the earliest great Semitic artist" who, with his staff on this huge job, executed a scene from the career of King Naram-Sin, grandson of Sargon. Yet we must remember that this Semitic art was by Accadian, not Palestinian, Semitic talent.

Earliest Hittite art from Asia Minor is so grotesque and revolting that we cannot really call it art. It aims to portray enthroned neo-Hittite gods, holding a scroll while two lions, sticking out their tongues, stand guard and an eagle-headed attendant holds the lions' heads. Look into the face of the four-footed, curly-haired, winged creature shown in illustration 43. Can you fancy admiring or worshipping such a concept, even if he did hold up a pillar of a popular temple in ancient Anatolia?

CULTIC FIGURINES, SCULPTURE, AND POTTERY

One of the first Palestinian art-objects we can actually see today is the bone *sistrum* (rattle) handle carved with a hatted head of some unknown deity, after the manner of an Egyptian Hathor column.

Found at Beth-el, it was reported by Albright in *Bulletin* No. 56, American Schools of Oriental Research. This appears to date from c.1500 B.C. and is of good quality of carving, portraying closed or drooping eyes of the deity.

This sort of cultic object introduces us to the enormous amount of material in wood, bronze, iron, glass, terra-cotta, clay, ivory, and bone miniature figures of man-made gods prevalent throughout the ancient East. In early Cyprus, for example, copper artists who made clay models of praying men and women or gods lugged "pigs," or units, of copper to their studios and there made their castings. Some of these survive today.

Illustration 49 shows two terra-cotta female figurines from the pre-Flood level of Ur in Sumeria, earliest home of Abraham. These tall-hatted, slit-eyed, broad-shouldered, crude earthy objects with their lewd overemphasis on sex give us an excellent and priceless example of how men and women for thousands of years before Christ "fell down to mud and clay." As we looked at them in the Museum of the University of Pennsylvania, we saw file before us a numberless procession of Astarte figurines and *teraphim*, or images of ancestors, such as Rachel hid in her camel-bags. We wonder how such revolting objects as the *teraphim* of Laish (Judg. 18) caused civil war or gripped Hebrew people to the extent indicated by the prophets' protests against them through many centuries? Not only did the Children of Israel in the period of the judges follow the gods of the people that were around them and serve Baal and the Ash-tarothe, but even Solomon, builder of the Temple, "went after Ashtoreth the goddess of the Sidonians, and after Milcom, the abomination of the Ammonites" (I Kings 11:5). Of course, Solomon blamed this practice upon his foreign wives' influence. For under various names—Astarte, Asherah, Ishtar—these lewd cultic figures and the sensuous rites which flourished in their shrines held a grip on populations from Asia Minor through Syria on to Egypt and east to Persia.

Illustration 48 shows an unglazed earthenware Astarte made between 1000 and 586 B.C. and left by some unknown cultist

at Lachish (Tell ed-Duweir) on the southern border between Palestine and Egypt, where it has within the past few years been excavated. It is hard to imagine how worship of such thick-necked creatures from the hands of man could ever rival the spiritual adoration of the true Jehovah.

Related to the cult figurines, teraphim, and the thousands of clay, faience, and semiprecious stone depictions of all the animals and imaginary god-personalities of the ancient East were amulets, carried on the person or honored in the home. The Cairo Museum, the Metropolitan Museum of Art, and every other treasure storehouse of near eastern art offer many examples of these crocodiles, cats, dogs, animal-headed human beings, and symbols, such as the *dad* (sign of permanence); the *was* (prosperity), the *ankh* or girdle (key of life), the *utchat* (eye of Horus), and the *nefer* (lute of happiness).

Somewhat akin to the figurines of antiquity were the Egyptian *shawabti*, or funerary statuettes of nobles, members of royal families, and servants, set in tombs and painted with the actual faces of the deceased and the living. These little figures were engaged in characteristic activities of life. Many of them are seen today in the Cairo Museum, the Metropolitan Museum of Art, and other centers of Egyptian treasure.

Père Vincent calls attention to the mask-like heads found among other cult objects near an Israelite altar at Taanach in the Plain of Megiddo. Are these efforts to portray primitive inhabitants?

Some of the near eastern peoples upon whom we have long looked down as barbarians prove to have possessed considerable art. The Hyksos horsemen, possibly from central Asia, who ruled Egypt from c.1750 to 1546 B.C., appreciated fine art, such as the famous spread falcon of granular gold work found by Petrie lying loose in the Gaza palace. This may have been fashioned by a Canaanite artist for his Hyksos master.

Long before Assyrians started cutting into vast stone reliefs the stories of their kings' heroic exploits, Hittites and their north Syrian neighbors were exercising this skill. Breasted credits the Hittites with distributing iron throughout the Near East

from the thirteenth century B.C. on. Numerous examples of heavy Syro-Hittite stone art from the eleventh and tenth centuries have been located in present-day Anatolia and north Syria (illus. 43).

T. E. Lawrence, excavating in the Hittite metropolis of Carchemish on the upper Euphrates, assembled what he considered the finest collection of Hittite pottery ever made in ancient or modern times and shipped it to the Ashmolean Museum at Oxford University. He and his colleagues found, also, in this place many fine cylinder-seals, gate-lions bearing historic inscriptions, a "new" staircase, hundreds of other fragmentary inscriptions, and 400 pots which they forwarded to the British Museum. Lawrence found one piece of Hittite sculpture which he considered even more artistic than Egyptian work, and which throws light on the evolution of Greek art and surpasses in quality some of the fifth-century Greek carving, yet antedating it by three or four centuries.

Other Hittite art turned up by Lawrence at Carchemish included small bronze horses; other terra-cotta horses; enormous slabs of sculpture depicting infantrymen and hunters fighting lions; and a temple wall, 20 ft. high, carved with demons, mythical beasts, winged creatures, and infantry. Lawrence says in his *Letters* that he worked hardest looking for Hittite culture.

The huge and gruesome stone statues of the Hittite god Hahad, excavated in the lower palace at Carchemish, and bas-reliefs of priests with cultic symbols, found on slabs in the same place, reveal the powerful but unlovely art of this once-dominant Asia Minor people.

Our knowledge of Hittites derived from Scripture gives the impression that they were undesirable people whom the Hebrews wished to uproot from the hill country of Judah and that they engaged in Solomon's elaborate horse-and-chariot market scheme. We wonder whether Uriah the Hittite, whose coveted wife, Bathsheba, was married by David after he had placed Uriah in the forefront of battle, was a mercenary general imported from the north to aid the Hebrew king's military plan. He seems to have had a worthy dwelling near the king's, where his wife

was seen by David as he strolled on his royal roof.

From the remote marshes of the Lake Van region, about halfway between Nineveh on the Tigris and the Black Sea, in what later was Armenia, came the handsome alabaster cylinder seen in remarkable illustration, 45. It shows the sun-god emerging from the gates of the east and is a superb example of Babylonian art in c.2000 B.C., several generations before the reign of the great Amorite King of Babylon, Hammurabi, who was contemporary with Abraham. So, when we enjoy this alabaster cylinder, we glimpse the sort of art which may have been familiar to Abraham, who came from Ur via Haran, west of Lake Van, around the Fertile Crescent into Palestine. Rostovtzeff of Yale goes so far as to say that the roots of world culture, civilization, and government go down into the rocky soil of the southern and northern Caucasus slopes, especially near Lake Van. The "refined" kingdom of Van seriously rivaled Assyria in the first thousand years before Christ.

Sir Flinders Petrie credits the Elamites—who carried war to the last king of Ur in Sumeria from their highland home east of Jordan, before 2000 B.C.—with introducing into Egypt the delicate art of carving ivory.

We have already indicated how the discovery of Canaanite culture in the Ras Shamra records of northern Syria has transformed our impression of these brilliant people, whose expulsion from Palestine seemed to a Hebrew prophet like Zechariah essential to the dawn of the messianic age: "in that day there shall be no more a Canaanite in the house of Jehovah of hosts" (14:21).

ARCHITECTURE

SUMERIAN AND LATER MESOPOTAMIAN CURRENTS

The geographical arc inscribed about little Palestine and Syria by neighbors from the Aegean to the Tigris-Euphrates and from the Black Sea to the Gulf of 'Aqabah inevitably poured art ideas of many nations into the fertile soil of the Holy Land. From

most ancient Mesopotamia, in the vicinity of Sumerian Ur, came the first use of columns of which we have record. The reeds which had been tied together to hold up reed-mat house walls in this low river country were as early as the al-'Ubaid period designed into little columns, which could easily be bent to make arches. These columns were in the Temple of Nin-Khursag, goddess of creation (c.3000 B.C.). Breasted makes Egypt the home of the first columns. But they date back to this earlier civilization in Sumer.

Some of the Sumerian columns were suggested by palm trees, which builders coated with clay or represented in mud. Into these, cone-shaped mosaic tesserae of mother-of-pearl, red stone, black paste, or colored pottery were set with black bitumen or pitch, seen today in a hoary Sumerian column in the Museum of the University of Pennsylvania. The little triangular insets of mosaic represented the bark of the palm tree.

This old Sumerian art influenced Asia Minor in 2000 B.C., says Childe, as the Roman Empire influenced Europe. The passage from prehistory to history, he claims, came a thousand years earlier in Sumer than at Nineveh and Susa. At Erech, mentioned in Gen. 10:10, traces of prehistoric occupation have been found.

From early Ur (Gen. 11:28), too, came the zoned layers of masonry built up to make a ziggurat, or brick platform with receding stages and three stairways, which gave a mountain-like base in this flat country to early temples and ultimately to Babylon's Tower of Babel (illus. 237) (Gen. 11:1-9); and hanging gardens at Babylon and Assyrian Nineveh. The temple was the most important structure of the city. Its shrines were dedicated to the god and his consort, with lesser shrines for a galaxy of minor cult protectors. The pattern of the ancient brick-and-mortar "Hill of Heaven" at Ur—which became the pattern for the Ziggurat of Babylon, the mighty Tower of Babel to the Hebrews, is still the best-preserved ziggurat of the ancient Near East.

Later Babylonian and Assyrian architecture was familiar to Hebrews exiled at Babylon and other Mesopotamian cities. The vast palaces at Shushan, Persepolis,

Babylon, and Nineveh were dizzying complexes of columned audience halls, carved staircases, and massive gates ornamented with reliefs of triumphal processions of tribute-bearing captives (illus. 210 and 22). These almost inexhaustible archaeological remains have been explored by the University of Chicago's Oriental Institute, founded by the late James H. Breasted, with his genius for archaeology and his tireless capacity for work. The vast spaces of wall in stone and glazed brick justified architects in calling enormous staffs of sculptors to ornament them with the characteristic war scenes, together with winged lions and mighty bulls.

It has been pointed out that temple architecture among Persians was less important than that of their palaces. The worship of their god of fire, Ahura Mazda, needed only simple altars where the sacred flame burned. Conventionalized winged figures represented this god of light.

Although Solomon's Temple at Jerusalem was not modeled after any Mesopotamian structure, as we shall see below, there were details of it whose atmosphere savored of the Euphrates, especially the enigmatic pillars, Jachin and Boaz, whose lines as our imaginations picture them (illus. 60) suggest portions of the Ishtar Gate at Babylon (illus. 113).

EGYPTIAN ARCHITECTURAL INFLUENCE ON PALESTINE

Through intermarriage of Egyptian women with such Hebrew rulers as Solomon, news of how temples and palaces along the Nile looked must have filtered in. Not only did Hebrew builders associate the motifs of papyrus and lotus bud and flower with Egyptian decoration, but they knew that Egypt built in terms of columned great-halls, such as the incomparable hypostyle festival hall of Tuthmosis III at Karnak which had been erected in the fifteenth century B.C., some six centuries before Solomon built his Temple at Jerusalem. They were told how imposing avenues of alabaster sphinxes lined the approaches to temples at Memphis (illus. of one surviving sphinx, 41); and how massive pylon gates, like truncated pyramids, threw impressive shadows over ap-

proaching worshipers. They knew the graceful obelisks erected before the temples at Heliopolis, which Moses saw under its name of On; the deep-carved hieroglyphics were as much of an enigma to him as to us the day we stood below their record of gods and of pharaoh. Of the colossal statues of the various Ramesses (illus. 40) they must have heard. And down to the New Testament times of Jesus and his parents in their days of refuge from Herod, the stately mass of the Gizeh Pyramids and their temples struck them with awe, as they still do. Just as old Sumer gave the ziggurat, Egypt gave the world of art its pyramid and its rock-cut tombs of the brilliant Eighteenth Dynasty. The ancient Step-Pyramid at Saqqarah on the desert near Memphis has a temple whose delicate proto-Ionic columns equal in beauty Greek columns of many centuries later, as we have recently learned through material excavated from the golden art period of 2600-2200 B.C., when Imhotep was chief minister and architect to the Pharaoh Djoser in the Third Egyptian Dynasty.

The fact that Egypt's high moments in art came soon after such conquests as Tuthmosis III perpetrated on Palestine and Syria suggests that economic prosperity is essential—paradoxically enough—to development of art. Financial and material backing through millennia of history have been prerequisites even to temple-building like Solomon's. The unique Egyptian hypostyle temple at Karnak had columns suggested possibly by tent poles of an early nomadic life. But it revealed a great stride from the dark tent to the five-aisled basilica lighted from above. One of the architectural gifts of Egypt to the whole world was clerestory lighting, which we see in cathedrals today, deriving a glow from upper windows in a set-back story.

The Second Dynasty Egyptian temple discovered at Phoenician Byblos on the coast of the present-day Republic of Lebanon is reckoned the oldest stone structure in the world—older than Pyramids of Gizeh or those at Saqqarah. But to the al-'Ubaid settlement in Sumeria still goes the glory of "the first dated brick in the world"—which again reminds us that the Sumerians had a higher art than the Egypt of its day.

HEBREW-PHOENICIAN ARCHITECTURE

Reading I Kings 3-8 and II Chron. 3-6, we gain a clear impression of Solomon's well-organized monarchy and the use to which he turned that efficient peace in building a Temple to the Jehovah he loved, as well as his own magnificent palace at Jerusalem and another for his Egyptian wife. With regard to the latter, it occurs to us that part of Solomon's peace policy consisted in making "affinity with Pharaoh king of Egypt" by bringing his daughter into the little old City of David until he "had made an end of building his own house, and the house of Jehovah, and the wall of Jerusalem" (I Kings 3:1). Border warfare between Solomon and Egypt would have delayed the wise king's building program. In fact, as he told his partner, Hiram of Tyre, David had been unable to construct the Temple because of the "wars which were round about him on every side." David got only so far as to rear an altar on the Jebusite threshing-floor of Ornan on Mount Moriah, and to bring up the ark from Shiloh. But that threshing-floor and that ark became the Holy of Holies for all the United Hebrew kingdom and for Israel through subsequent time.

Behind Solomon's vast projects was a remarkable organization for 973-933 B.C. He had a cabinet of twelve officers, one of which looked after the food and palace management each month. The fourth chapter of I Kings lists even their budgeted supplies. His viceroys collected huge amounts of tribute from land between the Euphrates and the Phoenician coast and from Syria to Egypt. Twelve thousand horsemen occupied his chariot cities and doubtless assisted with the well-set-up horse-and-chariot trading which contributed a large quota to Solomon's budget. He used cedars as if they were cheap sycamores; he considered silver and gold as stones.

But chief in his administrative policy was a business contract with the gifted King Hiram of Tyre, who had been "ever a lover of David," his father. A son is always wise when he builds up on the worthy strength of his father. He doubles his assets for success. Hiram ruled the

Phoenicians of Tyre, Sidon, and Byblos (Geba), which had always been noted not only for merchants but for skillful craftsmen. None knew how to "cut timber like unto the Sidonians," who were also famous for their glass. And the strong men of Geba (Byblos, illus. 37, which gives us our word "Bible") had the edge on the stone-fashioning of their day. For metal-working in gold, silver, bronze, and iron, Phoenicians (Canaanites) were noted. We have seen elegant examples of their work in the solid-gold objects excavated near the Tomb of Ahiiram at Byblos, now in the Lebanon Museum of Beirut. Their golden age of prosperity and art influence upon the whole eastern Mediterranean world was from about the era of Solomon to 600 B.C. Blending Babylonian and Egyptian influences in architecture, they handed on to Greece the gift not only of an alphabet but of the columns we call "Archaic Greek."

SOLOMON'S TEMPLE AND PALACES

Archaeologists have discarded the idea that Greek or Mesopotamian patterns were used for the Jerusalem Temple of Solomon. "Phoenician-Hebrew" is the best term we can apply to Solomon's impressive complex of structures from the white limestone—almost marble—quarried locally by Hebrews in conjunction with Phoenician supervisors of Hiram of Tyre. As Albright suggests in his *Archaeology and the Religion of Israel*, a small Syrian temple excavated by the Oriental Institute of Chicago in 1937 may be the missing clue. This north Syrian shrine of about the tenth century B.C. is rectangular, with three rooms; a portico with two columns in front, like Solomon's Temple (illus. 60); a main hall; and a cella, or shrine, with a raised platform. It is two-thirds as long as the Temple and may have been lined with cedar. Albright believes that its architect was Tyrian and that its interior decorations were Phoenician. These suggestions certainly challenge interest, as we compare them with details of Solomon's Temple, in I Kings. Going on to comment about the twin pillars, Jachin and Boaz, at the front of Solomon's structure, Albright says they were certainly not to support lamps. But, following a Phoenician model,



55. Grand Stairway from Severan Age at Samaria, built over Herodian steps to the Temple of Olympus, erected in honor of Emperor Augustus.

59. According to tradition, Peter was executed in A.D. 67 in the middle of Nero's Circus at the foot of the obelisk seen in this picture of the Piazza of St. Peter's, Rome. He was buried in a near-by cemetery for martyred Christians, the site of which is now covered by his Basilica. The obelisk was brought from Egypt by its Roman conquerors.





40. Statue of Ramesses II, accepted by many as the pharaoh of the Exodus, prostrate under palms at Egyptian Memphis (Ex. 9:1).

41. Alabaster sphinx, sole survivor of the magnificent approach to Temple of Ptah at Memphis, first capital of Egypt, founded by Menes in the First Dynasty.





42. (Left) Granite statue of Tuthmosis III, the Napoleon of ancient Egypt, in the Egyptian Museum at Cairo today. The portrait, when compared with actual mummy, reveals the accuracy of Egyptian art in depicting faces.



43. Basalt Hittite work of art unearthed in Anatolia. Hittites, strongest highland people of central Asia Minor, struggled against Semites for centuries to possess the Fertile Crescent.

44. Assyrian bas-relief from Iraq, showing the triumphal return of Assyrian soldiery with heads of enemies, bound prisoners, women, and children. (Oriental Institute, University of Chicago)





45. Sun-god emerging from gates of the east, as depicted on a Babylonian alabaster cylinder from region of Lake Van c.2000 B.C. Property of Metropolitan Museum of Art. (*Metropolitan Museum of Art*)



46. (Upper left) Gold and art-metal "Ram caught in the thicket" (Gen. 22:13) found at Sumerian Ur by Sir Leonard Woolley. One original is in the British Museum, the other, in the University Museum, Philadelphia.



47. (Lower left) Carved ivory figure with inlaid eyes, identical on both sides, from Megiddo, Palestine. This carved plaque fragment, used as furniture ornament, was excavated by the Oriental Institute of the University of Chicago from the treasury of a Megiddo palace, destroyed, presumably by invaders, in the twelfth century B.C. (*Oriental Institute, University of Chicago*)



48. (Upper right) Unglazed earthenware figure of goddess Astarte from first millennium B.C., period of the Hebrew monarchy in Judah; excavated at Tell ed-Duweir, border between Palestine and Egypt. (*Metropolitan Museum of Art*)



49. (Lower right) Pre-flood terracotta figurines from Sumerian Ur before 3000 B.C. (Gen. 11:31). (*University Museum, Philadelphia*)



51. Cretan fresco representing a bearer, part of a procession in the Palace at Knossos, etc. Late Minoan II level (1500-1350 B.C.). Water-color copy, original in museum at Heraklion, Crete. (Metropolitan Museum of Art)

52. Iridescent Roman glass, of fragile beauty, fourth century A.D. (Metropolitan Museum of Art)



52. Art-furniture par excellence: throne chair of King Tut-ankh-amun in Cairo Museum. The little Queen is placing perfume on broad collar of her young husband. Above them shines the Aton, whose rays end in life-giving hands.

53. Typical Pompeian fresco used in first-century-house wall decoration. This one features a worship scene, with snake, sacred to Aesculapius.



54. Gray earthenware jar handle with light-red slip; stamped with winged scroll and inscription in Hebrew giving name of Hebron. Found at Tell ed-Duweir, Palestine. Dates from first millennium B.C. (1000-586), period of Hebrew monarchy attributed to era of David. (Metropolitan Museum of Art)





55. Four-socketed candelabrum found at Nob, Palestine, in a cistern.

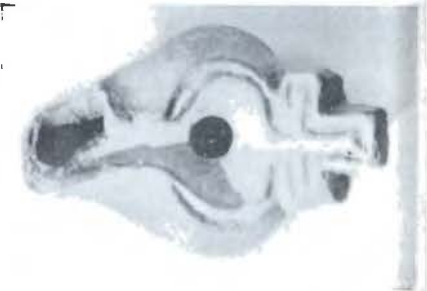


56. Clay lamp, of the Roman period, found in a Jerusalem well during current excavation for a new home. Earth is still in it.



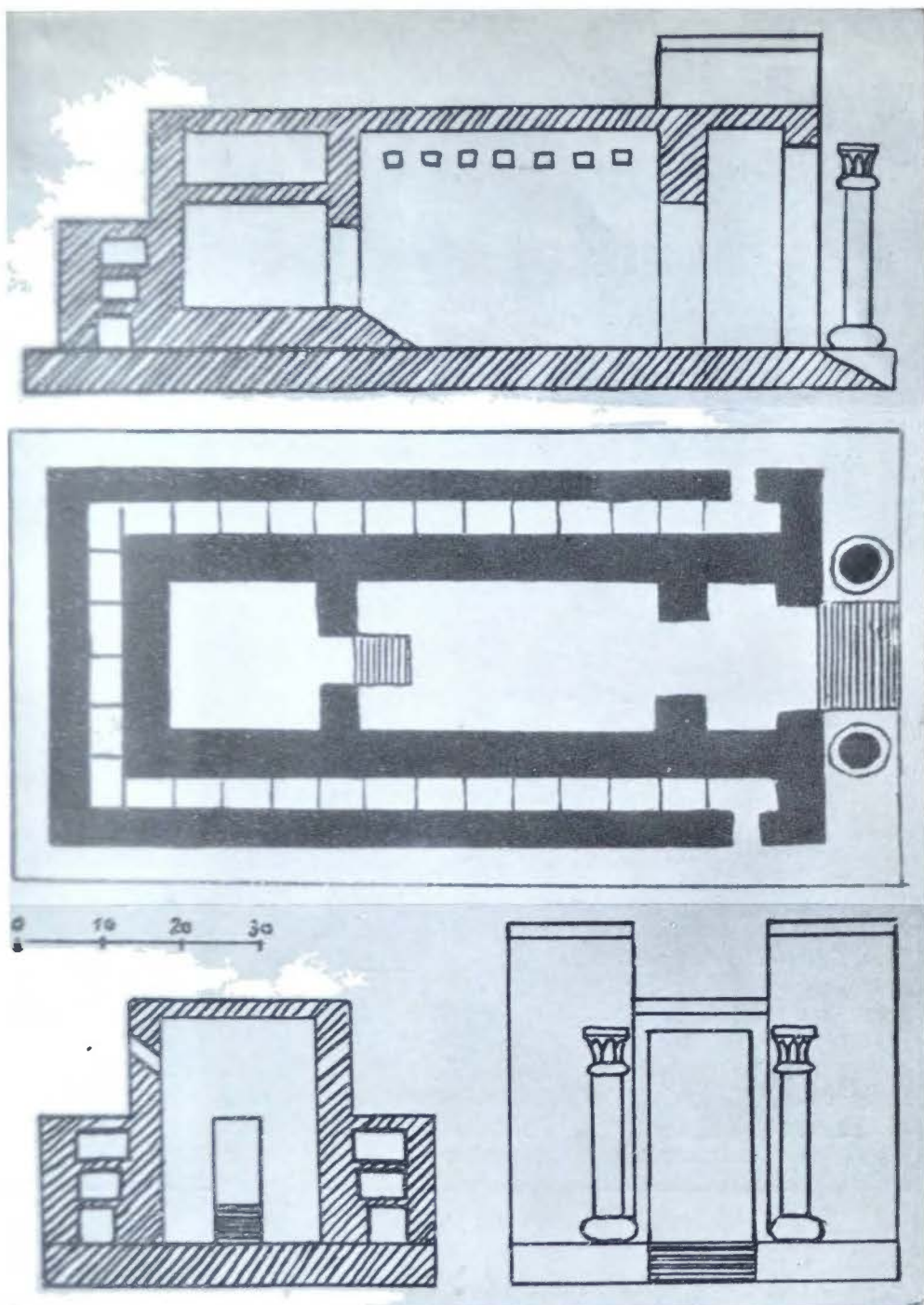
58. Clay foot-lamp (Ps. 119: 105). (Rev. Barbara Bowen)

57. Much used clay lamp from Palestine, with a square cross for handle.



59. Marble relief from vault of Arch of Titus in Roman Forum, erected to commemorate conquest of Jerusalem in A.D. 70. A triumphal procession with captives and soldiers carrying Jewish spoils and a seven-branched candlestick is depicted.



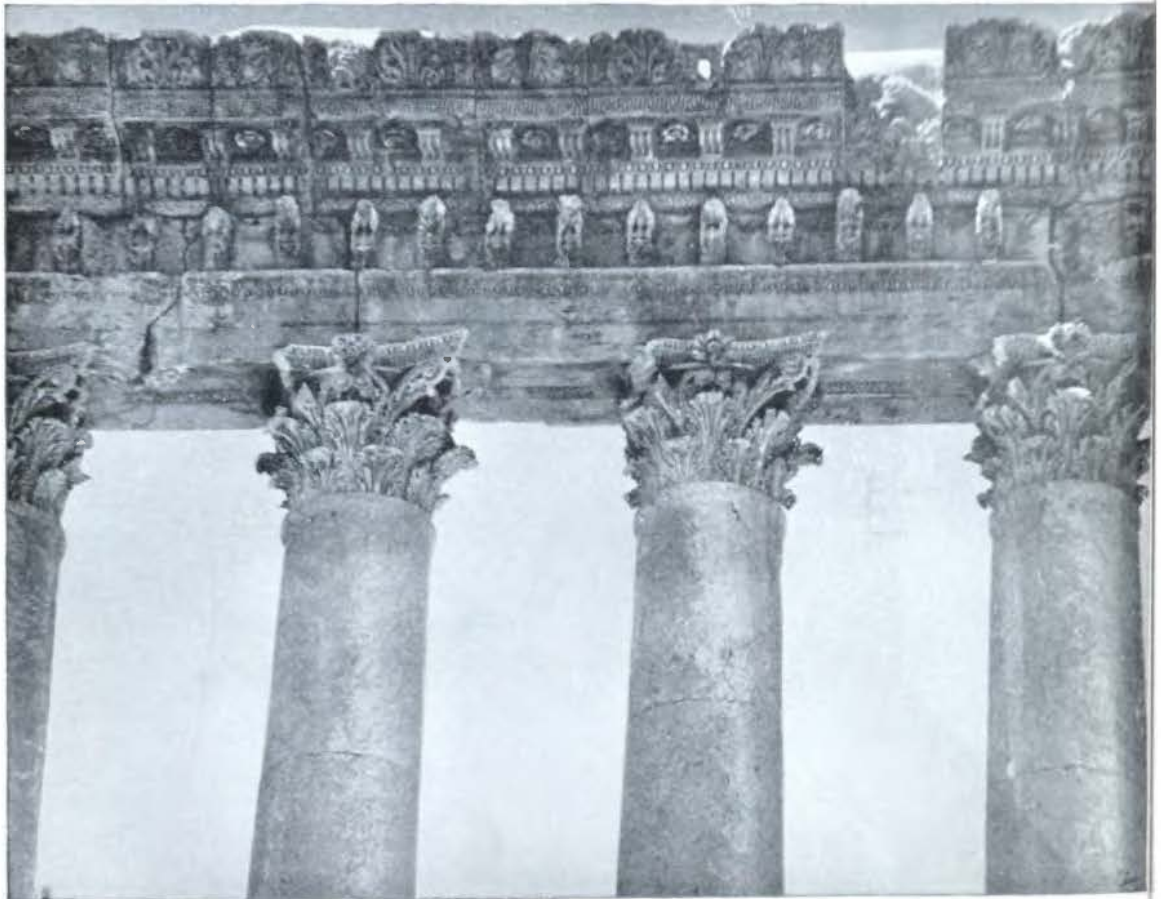


6. Solomon's Temple, as reconstructed by Professor Carl Watzinger, in *Denkmäler Palästinas*. Top sketch represents a side view of this Syro-Phoenician structure. Center view shows the ground plan. The Temple was on a platform approached by ten steps, on either side of which were win pillars, Jachin and Boaz (I Kings 7:21). After the vestibule, the Holy Place, *Hekel*, is entered (45 ft. by 30 ft. by 60 ft.). In this room stood the golden candlesticks, the table of shewbread, and a small altar of cedar inlaid with gold leaf. Illumination of this room was from clerestory windows—an Egyptian influence. The Holy of Holies, *Debir*, was reached by another flight of steps. Bottom sketches indicate the approach to the Temple and a cross section showing storage rooms. The scale is in cubits. (Dr. G. Ernest Wright and American School of Oriental



61. Ruins of a Capernaum synagogue attributed by early archaeologists to the centurion mentioned in Luke 7:5. Later authorities assign it to the second or third century A.D.

62. Detail of 60-ft. Corinthian columns of the Temple of Jupiter, built by Antoninus Pius at Syrian Baalbek, chief center for worship of Baal from earliest times.



they were lofty incense stands richly symbolic with cosmic significance. Did they, as they caught the gleam of Jerusalem sunrise and the mists of night in the Kidron Valley below, while their wicks burned and smoked, remind worshipers of the pillar of fire and the cloud that led Israel through the wilderness wanderings?

Each of these two pillars may have been 30 ft. high and cast in one piece. Standing not as supports for a lintel but beside the entrance to the Temple itself, they must be related to pillars which usually were a feature of Semitic sanctuaries in Syria and elsewhere. It is thought that they may be a "refinement" of the pillars which in Israelite shrines were part of a distinct pillar-cult. Certain ancient pillars had personalities and were carted from one temple to another, as from the Temple of Diana of Ephesus to the Byzantine church of Sancta Sophia which Justinian erected at Byzantium in the sixth century A.D. Obelisks stood beside great Egyptian temples at Heliopolis and Thebes; and the Phoenician temple of Melcarth and his consort at Tyre had two expensive obelisks beside it. Solomon naturally might make some concession to the fads of architects in his day. Or his Phoenician builders, having a dynastic purpose to keep the David-Solomon dominant over a priestly leadership, may have dressed up with Hebrew names, twin pillars which meant something else to them. Modern church architects usually insert personal whims into their fabrics. The pillar Jakin, or Jachin (I Kings 7:21), whose name, says Albright, came to mean "He [Jehovah] establisheth"; and Boaz, meaning "In Him is strength," may have been later inscriptions altered from former ones carved there by earlier builders, to whom Tammuz or Melcarth would have been gods. The important place accorded the twin pillars may indicate that they had been transported from some far-off earlier place of worship. The Basilica of the Nativity at Bethlehem has Corinthian columns which may have a history antedating their erection here.

Leroy Waterman, in an article, "The Damaged Blueprints of the Temple of Solomon," in *Journal of Near Eastern Studies*, October, 1934, stresses the idea that Solomon's structure was built as a

private chapel, approached from the palace. With advanced criticism, he suggests that until the later period described in I Kings 7 the building might have been called "The House of the Treasury," where giant cherubim overlaid with gold watched lest robbers lift the king's gold and silver treasures. By the time Israel was worshipping in its national Temple, the cherubim had been stripped of gold, claims Waterman. The author of I Kings attributed the construction to Solomon, to give it greater prestige, he suggests.

Many students of the sacred buildings on Mount Moriah agree that the only altar in Solomon's Temple was the native rock, as Pfeiffer affirms, not a copper altar of Phoenician work. The latter did not appear, he says, until the time of Ahaz (735-720 B.C.). The natural rock altar was in the open court.

Albright, the Semitic language scholar, makes an original interpretation of the "molten sea" which was part of the Temple equipment—attributing to water a source of life. He also adds to our wisdom by suggesting that the word "brass" throughout this Temple passage should be translated "copper." (Burrows prefers "bronze.") The portable chariot-wheeled platform on which the Sea of Copper and its twelve supporting lions stood may have had valuable amplifying qualities when Solomon stood to make his public addresses.

Certain critics strip some of the gold from Solomon's floors, which must have been stone overlaid with cedars from the Lebanon; from the walls of the upper chambers; and from the cherubim and palm trees of the olive-wood doors. They say that, if gold had been present in such literal lavishness, subsequent records of booty carried off by invaders would have included this gold-veneer, with the golden vessels which we know went to Babylon and to Rome. Of course, II Kings 18:16 refers to surrender by Hezekiah to Sennacherib of "gold cut off from the doors of the temple." Yet we feel that the author of the I Kings narrative of the Temple-building indulged in exaggeration of Solomon's fabulous wealth when he wrote: "Solomon overlaid the house within with pure gold; and he drew chains of gold

across before the oracle; and he overlaid it with gold." The Chronicles speaks of golden nails weighing fifty shekels (II Chron. 3:9). Quite authentic, however, are the Lebanese cedar boards which Hiram sent from his high mountains above the sea for the flooring, and the wainscoating of cedar, and the local wood of the sacred olive used for the carved cherubim.

The general plan of Solomon's Temple Area included his own royal palace and that of his Egyptian wife. The latter was at the south end of the sacred enclosure, which rose from the southeastern end of the city, on a surface built up by substructures of arches, some idea of which we gain today by going down into so-called "Solomon's Stables." We imagine how his sacred courts appeared when we walk today among the arcades along the Area and come to the innermost sanctuary, containing the rock altar of sacrifice (illus. 235) from which blood of animals flowed down to the Kidron Valley, probably mingling with water from the fresh-flowing Temple fountains, successors of which are today used for Moslem ablutions.

The three stories of chambers, probably reached by ladders and used for staff activities and lodgings, are succeeded today by the enigmatic rooms of the Grand Mufti and his bearded group of immams. The graceful steps, terraces, and arcades (illus. 120), with ancient olive and cypress trees near by, bring us into the mood of those who went up—for the Holy of Holies and altar of the shewbread stood on what is today the highest part of the Temple Area—to the House of the Lord with gladness and songs of thanksgiving and with psalms in their hearts.

At Jerusalem Solomon, in addition to the Temple, built his royal palace and throne portico, the palace for his Egyptian wife, and quarters for other "foreign women," a noble "House of the Forest of Lebanon." The dimensions of the latter, given in I Kings 7:2, were greater than those of the Temple. It was porched with stately pillars and built with alternating stone and cedar timber—a Phoenician technique, as Garstang suggests, for lessening destruction by earthquakes which still threaten the land along the deepest rift in

the earth's surface, the Jordan Valley. This "House of the Forest of Lebanon" probably served as a sumptuous audience chamber, like those we have seen in the Turkish seraglio at the "Sublime Porte." We wonder if Solomon here received the Queen of Sheba among his royal guests.

Can we see in the checker work, network of intersecting circles, and other motifs of Solomon's Temple Egyptian patterns coming in with his Twenty-first Dynasty Egyptian wife, daughter of an aggressive pharaoh who Petrie liked to think might be Shishak I, the king who conquered Gezer and gave it to Solomon's wife for dowry (I Kings 9:16) after he had burnt it and killed the Canaanite inhabitants? "And Solomon built Gezer." The dates, however, do not quite fit this Shishak I, whose friendship for the Hebrews certainly did not manifest itself in such acts as his sheltering the traitorous Jeroboam until the death of Solomon; or the expedition he led against Palestine, which stripped Jerusalem of "the treasures of the house of Jehovah [and] the shields of gold which Solomon had made" (II Chron. 12:9). Either the Egyptian father-in-law of Solomon soon ceased to care for his neighbor king, or else the Egyptian wife herself proved of temporary value to Solomon.

Egyptian kings paralleling the reign of Solomon were, as indicated by Steindorff and Seele, from priestly families or were princes from Tanis. The latter city was in the Delta and in close contact with Solomon's area. It had been a store city during the enslaved Hebrews' residence in Egypt.

Further details of Solomon's Temple are supplied by Ezekiel, whose Babylonian vision was based on the structure he had actually seen in Jerusalem.

The Temple built by Zerubbabel after his return from Babylonian captivity in 537 B.C., forty-nine years after Solomon's Temple had been destroyed, probably occupied the same site as the former one, having various courts, corridors of cells, and gates.

Even if Hiram's Phoenician craftsmen prepared "three courses of hewn stone and courses of cedar beams and metal castings" (in the Plain of the Jordan) for the elaborate utensils of the Temple, we gain a clear

impression from I Kings 6:36 that Hebrew artists engaged in the elaborate wood carving, overlaying and inlaying: "Solomon [and his staff] overlaid them with gold fitted upon the graven work." In fact, a half-Hebrew whose mother was of the tribe of Dan, and whose father was from Tyre, received honorable mention for his work on the gold, silver, brass, and iron work, as well as for his engraving (II Chron. 2:14).

But to the *Phoenician metal-workers* of Hiram must go the credit for the furniture of the Temple, including the ten golden candlesticks, 100 golden bowls, the shovels, basins, and even the copper doors of the priests' court. Hiram was expected to furnish some of the gold supply, besides.

The "fixed lattice work" of the three tiers of windows in the Temple itself were not the glass-fitted ones we visualize but probably slits for ventilation. The interior was sacredly dark with a dim glow from beautiful oil-filled lamps.

The palaces of Solomon (the "house of cedar") and his Egyptian wife probably had similar art characteristics, although Pharaoh's daughter no doubt insisted on having some high clerestory windows to remind her of home, and fountain courts with heavy pillars. It took Solomon seven years to complete the Temple; and thirteen for his palatial "house of the forest of Lebanon"—cedar-trimmed and durable as this elegant hard wood from the sacred mountains could make it. It had a pillared porch and adjacent to it the special porch for the throne from which he addressed his people.

Solomon's payment for Hiram's labor was wheat and pure, beaten olive-oil, paid "year by year." At the close of the twenty-year contract, Hiram exercised his oriental penchant for bargaining by asking for "a little bit more." Generous Solomon added "twenty towns in Galilee" with Canaanite populations, and even though Hiram did not fancy these cities when he came out to inspect them, he sent Solomon six more talents of gold. Tradition says that the Jewish king strove to please Hiram further by sending trained workmen to Ras-el-'Ain to build masonry for a water supply running into Tyre. As we have stood refreshing ourselves at springs of Ras-el-'Ain on

the edge of Tyre, we have wondered if Hiram really did build near these waters a lovely garden to give to Solomon, whose artistic tastes flowered in his Canticles of the garden and its love.

SYNAGOGUES

After the destruction of the Jerusalem Temple and during the Exile, religious instruction took place among the Hebrews chiefly in the home, where father relayed to son the saga of the Patriarchs and the journeys of Israel from Egypt to Palestine, from Palestine to Babylon, and back "home." Probably synagogues were permitted in exile. In the post-Exilic period beginning with the sixth century B.C., worship centers called "synagogues" began to be built in Palestine even after the Temple was rebuilt. As Albright has pointed out, the architecture of these buildings was the inspiration a few centuries later for the typical Graeco-Roman villa.

Jesus learned as a boy and taught as a rabbi in synagogues of Galilee, especially at Nazareth and Capernaum.

Soon after its installation in the new Museum of Archaeology in Damascus, we saw what citizens proudly called "the oldest synagogue in the world." It had been brought from Dura-Europos by the Yale University Expedition and re-erected carefully. Its dark little interior was worshipfully impressive with steps leading up to the niche where the sacred writings (Torah) had been kept. Tall, well-wrought, wooden portals are opposite this niche. Wall frescoes tell Old Testament narratives, much as the vast San Marco mosaics in Venice tell stories of the Old and New Testaments. Evidently inhibition against religious art did not prevail at Dura in this century. As C. H. Kraeling suggests in *Bulletin No. 54*, American Schools of Oriental Research, the Dura Synagogue makes a large contribution to our knowledge of synagogue architecture. Its peristyle court where ablutions took place is in front of, rather than at the side of, the building. This made possible a natural orientation, where the worshiper faced both Torah and Jerusalem. The Dura synagogue, unlike the Palestinian, had no provision for galleries to which women worshipers were

assigned. It had many features in common with the Wilderness Tabernacle.

Tumbled ruins of an elegant Palestinian synagogue appear in illustration 61, of Tell Hûm, probably ancient Capernaum along the cery shore of the Sea of Galilee. This one (built probably between A.D. 150 and 250) may have been the successor of an earlier synagogue erected in the time of Jesus near the caravan route from Damascus to Jerusalem along the Lake, possibly by the grateful centurion whose favorite servant Jesus had healed (Matt. 8:5-13) "when he was entered into Capernaum." In a palm-cooled garden Franciscans have resurrected fragments of bas-reliefs showing Jewish emblems including stars and vines, as well as Roman chariot wheels and tear-bottle recesses suggestive of Egypt. The vestiges at Capernaum are the finest yet found in Palestine. The mosaic floors of the Octagon are notable.

Other places where we have looked into the frank faces of solid Hebrew architecture include the palace level at Samaria (see below) where, in the ninth century B.C., Omri and Ahab were having their architects erect the luxurious establishments decried by prophets like Amos. Also at Hebron in southern Palestine, ancient home of Abraham and Sarah, we have noted the good workmanship of a Hebrew wall built near the Moslem mosque now covering the Cave of Machpelah where some of the patriarchs are buried. And at Lachish, Hebrew walls still stand near the guardroom where the famous Lachish Letters of Jeremiah's time were found (illus. 107).

ROMAN ARCHITECTURE IN THE LAND OF JESUS

The new Roman cities which gleamed in the Galilee, Judaea, and Samaria of Jesus' time bore every evidence of influences carried from Rome itself, recently made "marble" by Augustus the Emperor. Herod the Great, King of Judaea from c.38 B.C. to c.4 B.C., idolized Caesar Augustus, took pride in copying in his coastal cities of Ashkelon, Gaza, and mighty Caesarea, his chief city, the colonnades of the imperial capital, its temples, towers, aqueducts, and powerful walls.—

Few fragments are recognizable in the tumbled stones of the mighty port from which Paul sailed and which we found today infested by squalid Arab squatters.

SAMARIA

Samaria on its fat hilltop, looking snobishly down on main highways and maintaining rich olive orchards on its slopes, Herod completely rebuilt, so that the walls which had been erected in the ninth century B.C. by Omri and Ahab were superseded by solid Roman masonry. The three layers of history in stones are seen in the illustration of the Omri-Ahab-Roman foundations. Yet, for all the magnificence of Herod's new Samaria, nothing which remains from it today compares in art value or in human interest, with the "Samaria ivories" found near the Hebrew palace and cleaned and interpreted by John and Grace Crowfoot. Many of the Samaria ivories are in the Palestine Archaeological Museum at Jerusalem.

We are carried back to the glory of the Roman age in which Jesus lived when we see the numerous column fragments still *in situ* from the chief street of Herod and Severus. The Street of a Thousand Columns in Jerash over Jordan runs to its forum, and the Decumanus Maximus of ancient Ostia stretches to its Chamber of Commerce in the port of Rome.

Harvard University and the great American archaeologist, George Reisner, laid bare many thrilling sections of Roman history in Samaria, including vestiges of the vast Temple of Augustus, built by Herod on the site of an early Baal shrine. Its broad steps near the Israelitish masonry to which we have just referred were awe-inspiring (illus. 212). At their foot was found a tumbled torso of the emperor-god Augustus. All in all, Herod's Samaria was rated the most impressive architectural monument of this prodigious builder-king who took Rome as his model, even as Solomon turned to Phoenician Tyre for his architectural concepts. A basilica, or business center, such as might be seen in every Roman city, with tiers of seats for senators or local dignitaries; towered governor's quarters; impressive vistas; arches and columns—these universal

features of Roman architecture prevailed at Samaria. The summer threshing scene we watched one day, on what had been part of the Roman forum at Samaria, was a poignant contrast to the hauteur of the magnificent Roman city.

For further material on Samaria, see *Cities, Towns and Villages*, p. 157.

It is quite possible that the carpenter-family of Joseph at Nazareth took part in Roman construction not only in such near-by towns as Sepphoris, ancient capital of Galilee, but in the gigantic public works at Samaria and Jerusalem. Traveling guilds of masons and other craftsmen were impressed into service for such large-scale developments.

JERUSALEM AND HEROD'S TEMPLE

The new Roman Jerusalem created by Herod provided the stage on which Jesus carried out his ministry at the thronged capital. It was still gleaming-new in the days when he was daily in the Temple, teaching. In fact, Herod's Temple and attendant structures were not finished until A.D. 64. Herod had doubled the area of that sacred enclosure, making it practically the space we tread today when pondering the Dome of the Rock, the Moslem prayer-place on the site of Herod's and Solomon's Temples. For an impression of the gleaming-white and golden-gated glory of the Temple Jesus and his companions knew, we go to the imaginative paintings of the great French artist, Tissot, whose original water colors are in the Brooklyn Museum, and to the *Jewish Antiquities* of Flavius Josephus, who had seen Herod's Temple.

In our walks through the vastly impressive old Temple Area, whose fruits you see in our picture 120 we intuitively felt from the present shadowy arcades and impressive flights of steps, columns, and platforms something of the majesty of Herod's Temple with its alternating layers of colored marble and its intriguing vistas into chambers reserved for the functions of the priesthood. When we stood under the graceful little arcade near the outdoor Moslem pulpit, we felt that we were near the Great Hall of Paved Stones where the Sanhedrin sat and where Stephen, Peter, and John were tried. It challenged us to imag-

ine the whereabouts of the chamber in which the priests assembled to mete out shares of daily tasks such as trimming the wicks of the golden candlesticks or preparing the incense for the altar at the "second time of assembling," just before dawn filtered into the sacred enclosure from over the Mount of Olives. Certainly, the present-day jumble of minor buildings around the arcades helps us to realize the numerous chambers where animals were stored and washed for offerings, where the salt used in sacrifice was ever at hand, where the Court of the Women and the Court of the Gentiles were located. We have a good notion of where Herod's Tower of Antonia stood, northwest of the Area, from which soldiers could watch for riots. And we agree with those who believe that the hoary rock, once Ornan's Jebusite threshing-floor and now under the Dome, was encased and used in Herod's Temple as the altar of the Holy of Holies. When eleventh-century Crusaders arrived here, they believed they had found Herod's Temple and consequently erected the elegant metal grille we see now surrounding the Rock Moriah.

See *Defense*, page 182, for Herod's Citadel-palace Towers.

TRIUMPHAL ARCHES

The triumphal arch is characteristic of Roman architecture whether we look upon it in the Roman Forum, where the Arch of Septimius Severus, crowded with carved battle scenes, looks across the basilicas, rostra, and small temples to the Triumphal Arch of Titus bearing its stone procession of Jewish captives and their sacred Temple accessories (illus. 59) or in Jerash of Transjordan. The arch is the most unique Roman contribution to architecture in the Mediterranean world from the hands of its greatest master in Bible times. A fine example of the Roman keystone at the center of a portal is seen in the Temple of Bacchus at Baalbek.

GRAECO-ROMAN JERASH

Representative of Graeco-Roman architecture east of the Jordan is Jerash (Gerasa), whose wealth of excavated material challenged our imaginations as we walked

at sunset down its Street of a Thousand Columns past the once-busy forum at the terminus of a strategic caravan road and tried to untangle its present complex of pagan temples, Jewish synagogues, and nascent Christian churches. For an idea of the grandeur of Jerash, see illustration 36 and consult the volumes of the American Schools of Oriental Research, published jointly with Yale University and the British School of Archaeology. There are those who believe that Jesus, in his ministry east of the Jordan, visited this magnificent Roman city. No specific evidence of this has come to light. But he doubtless was aware of the vast activity in this superbly built member of the Decapolis chain of Greek cities. For further material on Jerash, see *Archaeology*, page 80.

THE ROMAN TEMPLE-COMPLEX AT BAALBEK

A rich field for the study of Roman architecture in Palestine is the acropolis of Syrian Baalbek, sixty miles by motor today from Beirut. This pompous site, inhabited in the time of Abraham, commands the plain between the Lebanon and the Anti-Lebanon mountain ranges, the rich Beka'a from which even in summer a view of snow on Hermon is visible. What a site for temples! No wonder ancient architects selected and adorned it. Worship here roots back to earliest Syrian history. As we pointed out in *Cruising the Mediterranean*, when Roman architects came to this center of Baal worship in the first century A.D., they raised temples not only to their own deities but to Syrian, Greek, and Phoenician ones. Possibly priests from Heliopolis in Egypt, whose obelisks and temple Joseph knew, had founded this second Heliopolis, city of the sun in a northern land.

One's first impression of the ruins is that a race of giants crashed in here and made merry with history, tossing everything into a conglomerate jumble of stone, further confused by several earthquakes and wars. One misses the simple purity of line found in Greek temples, resents Roman overornamentation, and then settles down to find meaning in the chaotic array. In a little room within the entrance

gate a plaster model has been set up, showing the layout of the temples in their prime. With a study of this, the whole takes on meaning: the propylaeum porticoes with twin towers, at the entrance to the hexagonal forecourt where the priests met the people who walked in the shade of a columned portico; then the enormous Great Court with its two long ablution basins, its central statue, and the altar immediately in front of the broad steps leading up to the towering Temple of Jupiter-Baal. This temple, erected by Antoninus Pius (A.D. 86-161), was considered one of the wonders of the world. It embodied in its construction fifty-four giant Corinthian columns 60 ft. high, fitted with amazing precision, and enclosed a cella 290 ft. by 160 ft. Six lofty columns joined by their entablature still tower against the intensely blue Syrian sky and help one imagine the staggering effect of the temple when intact (illus. 62).

Certain students of architecture have wondered whether the distinctive hexagonal forecourt of the Temple of Jupiter, a feature found elsewhere only in Trajan's harbor at Ostia, may reveal a Semitic influence—the star of David, with its points lopped off. More probably, it symbolizes the heavenly bodies associated with Baal worship, with Baal at the center and the heavenly bodies, such as Venus, Saturn, and the Moon, denoting the six days of the week in the six sides of the hexagon. Each side received the offerings of people on its own day of the week. All around the hexagonal forecourt were small chambers where priests might interview worshippers.

The Temple of Bacchus is a remarkable example of Hellenistic architecture, which may have influenced the rock-cut Nabataean temples at Petra.

GREEK ARCHITECTURE IN BIBLE LANDS

IN THE TIME OF PAUL

Just as early Babylonia gave us the first columns of reed bundles or palm depictions in mud and mosaic, and the stepped platform, or ziggurat; and just as Rome provided the arch and universal city plan with its long, columned street; so, when

we think of what Greece gave to the architecture of Bible lands, we see the classic beauty of temples which had evolved in Egypt many centuries earlier but reached their perfection in what Paul beheld as he swung around his circuit from Palestine through Asia Minor to Greece and Italy. In Corinth he daily saw the archaic Doric columns of the seventh-century Temple of Apollo. Sojourning in Athens, he appreciated, as much as he could appreciate anything pagan, the perfection of the Doric columns of the Parthenon (illus. 63), and what he decried as "temples made with hands" (Acts 17:24), opposite Mars Hill where he spoke; he saw, too, the Ionic grace of the Erechtheum with its "most perfect doorway in the world." In downtown Athens he could have looked up to the gigantic Temple of Olympian Zeus, begun by Peisistratus and waiting for Hadrian to complete it. In many a city of his Asia Minor travels Paul saw Greek temples. Had he journeyed into northwestern Sicily, he would have seen the dramatic unfinished Greek Temple at Segesta, abandoned during invasion. Had time permitted while he was in Rome, he might have gone through sheer interest in the history of religion to visit the complex of Greek-columned Doric beauties at Paestum, the Greek grain and trading colony south of Rome, whose fifth century Temple of Neptune appears in our illustration 241. In the shadow of these shrines nineteen centuries after Paul, Red Cross tents sheltered wounded American landing forces.

IN THE LEAGUE OF TEN GREEK CITIES

Jesus, whom wisdom-seeking Greeks sought out (John 12:20), was familiar not only with the Greek language, besides the Aramaic of his daily speech, but knew the cultural beauty which for three centuries before his era had been implanted in cities east and west of the Jordan by Alexander the Great and his successors. Architecture akin to that on the Greek mainland had been planted at Jerash, Pella, and the other cities of the Decapolis. The little hillside theatre at Amman, one of the ten Greek cities, is as Hellenic

as it is Roman. Even Damascus, which we always think of as a Syrian art center, was a member of the Decapolis and bears imprint of Greek architectural influences. Ruins of Kanath have been excavated and may yield Greek traces. So, too, Beth-shan has given its quota of evidence. Raphana, Gadara, Hippos, and Dion, if ever explored, may add their quota to the Greek heritage deposited in the league of ten cities. Matt. 8:28-34 records one of the numerous instances when Jesus went into the Decapolis, to feed, to heal, to teach.

IN TRANSJORDAN

In the complicated group of temples excavated at Jerash in Transjordan, a shrine has come to light near "The Cathedral" which appears to be Nabataean, having points in common with temples at Petra and at Khirbet Tannur in southern Transjordan. This latter important site between the southern end of the Dead Sea and Petra may have been known to Moses. It has left us rich relics of its high place for cultic meals; its temples; its stone reliefs depicting Zeus-Hadad, the grain goddess Atargatis, and the fortune-goddess Tyche; incense altars; and countless crude figurines of fertility-goddesses with bulging cheeks, conspicuous breasts, and large ears. (For illustrations of similar figurines from Ur see picture 49.) Through its art, found by such excavating groups as the American Schools of Oriental Research led by Nelson Glueck, Transjordan has much to tell us of the last centuries before Christ and of the first Christian century.

The architecture of the Nabataean "Temple C" at Jerash combines the eastern court with elements of a columned Greek temple. This combination became typical of Graeco-Roman architecture in temples at Syrian Baalbek and in Jerusalem of Herod.

HITTITE ARCHITECTURE IN TEMPLES

Not many Hittite religious structures have thus far been found. But in 1939 Sir Leonard Woolley excavated at Atchana near Syrian Antioch ruins of four superimposed temples dating probably from the

fifteenth century B.C. to the twelfth. In the second-level temple he found a basalt altar whose ends are carved with a pair of long necks from animals resembling ostriches, and whose steps are flanked by notable carvings of open-mouthed lions. Close to the altar was a spear, intended as a cult offering. Prone on its face and covered with cuneiform writing was a limestone statue which had once stood on a lion-footed throne in the temple.

FRESCO PAINTING

PALESTINIAN

Not upon canvas but on smoothly plastered walls or natural cave surfaces, as at Beit Jibrin, painters of Bible lands plied their arts. Frescoes done possibly 6,000 years ago on early chalcolithic sites at Megiddo above the Plain of Esdraelon and at Jericho in southern Palestine have been found. These show designs of geometrics, formed by intersecting straight lines; of gods, seated; or of well-drawn birds. Similar frescoes have been located in centers of "irrigation cultures," such as in Mesopotamia and Egypt, which amassed enough wealth to encourage artists to reveal their talents to the lords of the canal districts. The earliest frescoes yet found are from an Uruk-level temple in southern Mesopotamia.

Near Tell Sandahanneh in the Shephelah and the Hellenistic city of Marisa (Beit Jibrin), Sidonian settlers decorated tomb walls in caves about the third century B.C. with paintings showing a procession of animals. Far earlier than these are the Ghassulian Age frescoes described by C. C. McCown in *The Ladder of Progress in Palestine*. These treasures of the ancient Jordan Valley antedate by 2,000 years the noted Minoan frescoes at Knossos in the palaces of the sea-kings of Crete, the earliest of which were painted between 1900 and 1750 B.C. Of these amazing Minoan frescoes, which were seldom surpassed anywhere in the Middle East, see an example in illustration 50. This vase-bearer is from a wall in the king's palace at Knossos (1500-1350 B.C.) where he was part of a procession. The original is in the Candia Museum in Crete.

CRETAN

Minoan Crete, which had finished its best frescoes 1,000 years before the golden age of Greek art on the mainland, won the admiration of the world by her "toreador and horse," her "saffron-gatherer," and her well-drawn partridges in shrubby backgrounds. Sir Arthur Evans, excavator of the Knossos labyrinth of structures, believed that the frescoes, already painted on very thin slabs of plaster, were attached to the walls of the House of the Frescoes. He was impressed, too, by the painted decoration on the famous sarcophagus dating from c. 1400 B.C., portraying the worship, weapons, and funeral rites of Cretan people adoring the great mother-goddess and her birds.

ROMAN

Wall frescoes continued popular in the Mediterranean until the time of Jesus and of Paul, when the first-century portraits and snakes sacred to the god of healing, Aesculapius, were made (illus. 53). The Villa of the Mysteries in Pompeii has a vast area covered with cult rites in fresco. It is remarkable that so perishable a medium as paint on plaster survives so long.

EGYPTIAN

Egypt brightened her tombs by gay frescoes depicting in vital art the life lived on earth and hoped for beyond the grave. The stones with which she ground her paints for this work are seen in museums today. They are worn smooth with use. We recall one such stone polished a rich dark-brown or red by the daily art of its user, now in the University of Pennsylvania Museum. Cairo still shows in her treasure house the palettes of semiprecious stones which were tools for her painters of long ago. These were part of the *mise en scène* of the paintings on low relief, in the rock-cut tombs of Thebes and in the lively tomb chambers of Saqqarah, near Memphis, happy with scenes from Egyptian farm life, taxgathering, the festival meals. Egypt, like Crete, excelled in her painted sarcophagi and mummy cases.

One coffin is painted with a New Kingdom dinner party: married couples and single people are depicted on separate tiers.

As for characteristics of Egyptian painting, Petrie in an early book, *Egyptian Decorative Art*, indicates the flare for form and drawing which characterized the Egyptians more than almost any other people. They made designs of everything they saw, from the animals of the Nile to feathers of birds, reeds of their marshes, and supremely the lotus with its buds and decorative leaves (illus. 117). In the use of the lotus motif their paintings on coffins, tombs and palace walls showed largest development. As early as the Fifth Dynasty (before 2200 B.C.) they featured a capital of two flowers tied by stalks—a step towards the Greek acanthus-leaves concept of the Corinthian capital. One of their oldest decorative patterns was the jagged zigzag line border (4000 B.C.) which did not become the graceful curving scroll for another 2,500 years, when in the Eighteenth Dynasty splendor it wound itself like the long stems of the lotus under water, a thing of great beauty.

Concerning the intricate symbols painted on Egyptian sarcophagi, Petrie offers an interesting interpretation of the oft-repeated ankh, or key of life, sometimes called the "Egyptian cross." It is carried by many pharaohs and deities (illus. 239), as if they were striding off to unlock the secrets of the hereafter. It is shaped like a T with a loop handle at the top. But Petrie suggests that it represents a girdle with loop hanging down. A feminine girdle, with longer loops hanging down, says Petrie, is the *thet* symbol of Isis, also associated with life.

ART FURNITURE

Art furniture made in Bible lands has survived to modern times in the notable throne-chair of King Tut-ankh-amun in the Cairo Museum (illus. 52). It is small, made of carved wood overlaid with gold and richly decorated in silver, glass, semiprecious stones, and glazed faience. It rests on legs made of feline animals, the front ones topped by admirable lions' heads. Two crowned protective serpents form the arms. The back panel is the

climax of the design: it shows the young Queen Ankhnesenamun about to put on the shoulder of her husband perfumed ointment from a small vase. On the happy little royal pair, the solar disk, symbol of El-Amarna, sheds its blessing from the upper part of the panel. Together with this famous throne chair, Cairo Museum has the gilded footstool of this same Eighteenth Dynasty ruler. It is carved with prostrate prisoners of the monarch who tramped on them each time he set his small royal feet to rest on that stool. Other stools are there, together with carrying-chairs, and a bed whose foot is made of ebony, ivory, and gold, with carved god-Bes figures flanked by lions, to ward off evil spirits from the sleeping pharaoh.

A notable collection of gold-plated furniture used by Queen Hetep-heres of Egypt, mother of Khufu (Cheops), builder of the Great Pyramid of Gizeh, was found by George Reisner of the Harvard-Boston Expedition to Egypt. Her gold-overlaid carrying-chair and other furnishings which were new in the thirtieth century B.C. were lifted from a deep shaft near the Pyramid, where they had been placed by her son just east of his Pyramid, after her tomb had been looted in that early age. The original, reconstructed, is in the Cairo Museum. A reproduction is in the Boston Museum of Fine Arts. We know from I Kings how Solomon's royal throne at Jerusalem looked. And Cretan excavations of Sir Arthur Evans have shown the simple, high-backed throne-chair of King Minos himself in the Knossos palace; at least we like to think that this seat found in the throne room of 1600-1400 B.C. is that important piece of furniture, whose rugged form reminds us of the Coronation Chair in Westminster Abbey.

The art furniture of King Ahab at Samaria in the ninth century B.C. has already been mentioned (p. 98).

GLYPTIC ART

See Business Transactions, page 134.

GLASS

This medium of beauty was made by people of ancient Bible lands. In fact, it

is mentioned in Scripture in the Revelation of John of Patmos, who, sitting on his craggy island-prison, Patmos, saw many a gorgeous Mediterranean sunset which led him to speak of "a sea of glass, mingled with fire" (Rev. 15:2). And when he envisioned the New Jerusalem, he saw streets of "pure gold, as it were transparent glass." He lived in the Roman age when transparent glass was a luxury and a novelty, something more radiant than the opaque glass made by ancient Egyptians and Phoenicians in their earliest art efforts. Sidon was early a glass-making center, even as Hebron is still famous for colorful hand-blown glass. In 1942 a new find of Phoenician glass was made in the Byblos district of Lebanon during the construction of a railroad from Haifa to Tripoli.

However, we must be wary about Scripture references to glass. When James referred to a man "beholding his natural face in a mirror," he probably pictured one of the highly polished metal mirrors, such as were used in Egypt and Pompeii. A polished bronze or primitive steel mirror was probably implied in Isaiah's vain, mincing "daughters of Zion," who carried vanity cases as girls do today—"hand-mirrors," the prophet calls them, used for their "well set hair" (Isa. 3:23, 24). When Paul referred to those who "see in a mirror, darkly" (I Cor. 13:12), he may have been thinking of the unsatisfactory quality of bronze mirrors, or of those crude glass mirrors Rome was producing in his era. So, too, Job the man of Edom, who described the sky as "a molten mirror," was thinking of the metal type. It could melt as easily as a glass one.

Egyptians dispute with Phoenicians the first discovery of glass. Certainly, the dwellers along the Nile knew its beauty in their very early art efforts as far back as 2000 B.C. They made, however, opaque glass—not the lovely transparent varieties—by molding it over a pottery core which they removed before they added decorations of other shades of glass. Beads, perfume boxes, necklaces, bracelets, tear-bottles (illus. 51), and inlay work were made of Egyptian glass from 1500 B.C. on. Artists extracted on furnace floors from quartz pebbles exquisite shades of henna, lapis blue, sky-blue, red, and yellow, which

we see today in jewelry from excavated tombs. They knew in the time of extravagant Tuthmosis III of the Eighteenth Dynasty how to make strips of glass which they rolled into rods and drew out for beads, having holes to receive their threads, as Venetian glass beads are worked today at Murano. Too, they made animals of glass.

Some charming glass vases in Egyptian blue and several cream-colored glass cups are included in the Eighteenth Dynasty treasures of King Tut-ankh-amun in the Cairo Museum. This art was new in the fourteenth century B.C., before the Hebrews had made their Exodus from that land. A resourceful papyrus hamper, which had probably carried fragile glass vases, is in the same museum.

In the first century A.D., after the discovery of transparent, fragile Roman glass, Egyptian Alexandria developed a world market for rare glass which she maintained for centuries. Some of her thin perfume and wine bottles she exported as far as Britain, together with beakers, goblets, deep bowls, and flasks sought by collectors of these costly luxury wares.

Champions of the *Phoenician origin of earliest glass* follow the statement of Pliny that one day a certain ship, loaded with blocks of niter, came into Byblos harbor near the Belus River. Using some of these niter blocks to prop up cooking vessels on the sandy shore, Phoenicians saw their fires melt salt, which blended with the sand and began a flow of glass. Certainly, Belus River sand was long noted as a desirable ingredient of fine glass.

Soon after the residence of Paul at Corinth, this city on the isthmus became a very famous center for fine Roman glass. One day, as we were walking near the archaic Temple of Apollo, well known to Paul, we saw something gleaming with dazzling beauty at our feet in the dust heaps of the once throbbing merchant city. Stooping to gather it up, we found in our hands fragments of indescribably blue iridescent glass, in layers which crumbled to dust as we held them. Their intimate contact with earth over centuries had given the characteristic iridescence we associate with Roman glass. Not pigment but forces of disintegration in damp tombs create the

frail beauty of long-necked, thin, pink Roman perfume flasks; or small tear-bottles looking like wrinkled dates; or pear-shaped, bulbous Alexandrian glass bottles of sapphire blue that were new when this glass market was in its infancy (illus. 51).

GOLD AND SILVER WORK

See Jewelry, page 269.

IVORY, EBONY, AND ALABASTER

The elephant gave his tusks for ivory and thus enabled artists of Bible lands to carve charming panels, boxes, and statuettes used in worship.

Ivory is mentioned several times in Scripture. Encrusting royal furniture was one of its favorite uses; Solomon "made a great throne of ivory, and overlaid it with finest gold" (I Kings 10:18). This famous throne at Jerusalem, which awed even the wealthy Queen of Sheba on her visit, was approached by six steps fitly ornamented, "with a footstool of gold" and with twelve symbolic lions carved as guards of the throne. King Ahab, the ninth-century king of Israel, built the famous "ivory house" at Samaria, with beds and couches of ivory denounced for their extravagance by the prophet Amos (3:15). For more of the noted ivory panels which gave the term "ivory house" to this structure, see pages 98, 157. Ezekiel refers to Phoenician traders of Tyre who exchanged their wares for the "horns of ivory and ebony" supplied by "many isles." And we know that Solomon's navy of Tarshish brought him once every three years a cargo of ivory, together with gold, apes, and peacocks, suggesting the warm lands of Punt and the east African coast as source for these luxury wares. Queen Hatshepsut of the New-Kingdom glory (1504-1482 B.C.) five centuries before Solomon was sending to this same Somaliland section for art commodities needed for her superb Temple of the Splendors of Amun, at the foot of Deir el-Bahri cliffs.

Hezekiah is reputed to have yielded as part of his tribute to Sennacherib tusks and hides of elephants.

Numerous specimens of the skill of ancient ivory-workers in Bible lands, artists

who went from one job to another, have come to us from excavated sites. In Palestine, Megiddo yielded to the spade of the University of Chicago's Oriental Institute some 400 pieces of ivory left behind in a half-underground treasury of three rooms, when the palace of c.1150 B.C. was suddenly abandoned. C. C. McCown describes this hoard of "collectors' pieces," which is chiefly twelfth-century Phoenician art but includes also Hittite and Egyptian articles, as "sensational" in value. Among the collection are panels carved with consummate beauty, ivory-inlaid gaming-boards such as people in most ancient Bible lands delighted to use, plaques incised with processions of captives and with lovely lotus blossoms, boxes, figurines of wild animals used in worship, and even a human-headed sphinx clasping a cup. These ivory treasures were not the only art gems found on this same site. For in an earlier palace here the Institute found a cache of lapis lazuli objects and golden ware, including the famous shell-bowl. Lapis, which was so popular with near eastern artists of all times, was found in its finest quality near the town of Lazul, in present Afghanistan, on the ancient caravan route through Badhaksan.

Best known of the ivory collections found in ancient Palestine are the Samaria ivories, thousands of fragments of which have been cleaned, studied, and described by John and Grace Crowfoot. They are described in the Samaria-Sebaste Reports of the work of the Joint Expedition of Harvard University, the Hebrew University in Jerusalem, the Palestine Exploration Fund, the British Academy, and the British School of Archaeology in Jerusalem. They put us into actual touch with the ivory-trimmed palace of King Ahab, who ruled Israel from 876 to 854 B.C., contemporaneously with the prophet Elijah.

These frail bits of ivory are among the most valuable finds in this costly excavation at Samaria. They served as paneled borders for thrones and couches, decorative borders of palace rooms, and trimming for stools. One panel shows the famous "woman at the window" motif. And many of the little gems are inlaid with gold and lapis lazuli. One of the most famous medallions portrays the Egyptian god Horus as a child sitting on a lotus leaf.

naked save for a wide jeweled collar and a pair of bracelets. Many other Egyptian symbols appear in the designs of the ivories—although the artists who carved them may have come from Syria or Phoenicia. There are no Assyrian patterns, such as processions of warriors. Ahab was allied with Hama, Damascus, and Phoenicia, and the Crowfoots believe he may have brought his ivory-workers from any of these areas. The elephants who supplied the tusks may have lived in eastern Syria, for officials of Tuthmosis III of Egypt hunted elephants in the upper Euphrates.

The ivories from Samaria are considered the most revealing record we have, of the art of the Israelite monarchy. These pieces of Hebrew-Phoenician art are in some instances signed with letters made by the craftsmen in the Hebrew-Canaanitish, or Aramaic, language.

From north Syrian Ugarit (Ras Shamra) has come an ivory box-lid, showing in the finest style of Cretan or Mycenaean art a fertility goddess, with Cretan attire but Syrian traits.

Egypt, so near a boundless supply of elephant tusks in the jungles of east Africa, made herself plenty of ivory gadgets, from ostrich fan handles such as we have seen in the Cairo Museum to ointment and jewel boxes and statuettes of favorite deities. Unadorned ivory panels above strips of ebony and blue glazed faience trim the famous gem casket of Princess Sit-Hathor-Yunct (now in the Metropolitan Museum) from the Twelfth Egyptian Dynasty (c.2000-1780 B.C.). And ivory combs have come to light in every Egyptian level, whether at Judaeon Lachish or Phoenician Byblos. Curl and wig head-dresses demanded attention.

In Egypt, the ivory-carver went hand in hand with the carpenter, to inlay his boxes, chairs, thrones, cosmetic holders, and jewel caskets. The British Museum displays work from his fingers in the form of remarkable ivory chair legs, figurines with human portrait faces, and spoons. And the Cairo Museum shows a charming little ivory statue of King Khufu himself, builder of the Great Pyramid of Gizeh. This Fourth Dynasty gem from Abydos, on the Nile north of Thebes, is our only statue of this famous pharaoh. The Cairo

Museum also treasures the prehistoric ivory art work of Badarian Egyptians in the form of bracelets, which we have admired the more because they were made with crudest weapons of flint as early as 4500-4000 B.C. From the Amratian prehistoric grave at El-Mahasna near Abydos has come an ivory male figure which is one of the two oldest human figures in the entire Cairo Museum. Ivory was skillfully used to decorate the fine alabaster-and-gold vase of Tut-ankh-amun in the Cairo Museum, together with his wood-and-ivory pen case, his red-stained ivory dish, his ivory-trimmed headrest, ivory bracelets, and the ivory castanets for merry moods of his Queen. Tut-ankh-amun's beautiful gaming-board, designed for one game on each side, like our checkerboards, is of ivory. The men are of four strips of ivory, white on one side and black on the other, the score of each throw being determined by the proportion of white to black.

And thus we see that ivory was coveted as an art medium in ancient Bible lands. Solomon, in likening the neck of his beloved to "the tower of ivory," thought he was paying a great compliment to his fair one in the fruit garden (Song of Sol. 7:4).

Ivories in quantity were found in the Assyrian palace of Tiglath-pileser III (746-729 B.C.) at Khadattu, east of the upper Euphrates. One find dating from late in the ninth century B.C. carries an Aramaic inscription mentioning Hazael, King of Damascus, contemporary with Ahab and Elijah, mentioned in I Kings 19. Such art-finds bring us close to the oppressors of troubled Israel.

Because of sharp color contrast, ebony wood from Ethiopia and jungles of tropical islands and India was used in ivory inlay work. Ezekiel (27:15) refers to ebony as being brought with ivory to Tyre by Phoenician traders.

Creamy yellow-white alabaster was a favorite art medium in ancient Bible lands. This almost opaque mineral, a relative of marble, lent itself to the popular Egyptian canopic jars which held the internal organs of embalmed mummies, and to elegant ornamental vases inlaid with semiprecious stones and bits of glazed pottery. The famous alabaster lamp of Tut-ankh-amun

in the Cairo Museum is referred to below (p. 108). The authors of the first three Gospels all refer to the costly alabaster box in which the woman who anointed the head of Jesus carried the expensive unguent criticized by Judas. This is a clear example of Egyptian social customs carried up to Palestine. Precious containers of perfume and ointment were part of every well-to-do Egyptian house.

Some interesting alabaster lamps were found in Jerusalem's so-called "Tombs of the Kings."

LAMPS

IN JERUSALEM WORSHIP

At the beginning of Hebrew worship, provision was made for a lamp filled with pure beaten olive oil, to be kept burning outside the veil of testimony in the Tabernacle (Lev. 24:2). Throughout their history Jews faithfully assigned to their priesthood the task of keeping the Temple lamps trimmed and glowing in mystical worship, even as throughout the Moslem world of the ancient East today, many little lamps (often now electrified) burn with artistic and sacred light.

In Solomon's rich era the seven-branched golden candlestick was a chief treasure of Jerusalem's Temple. When in A.D. 70 it was carried to Rome in the conquest of Titus and there engraved in effigy on his Arch in the Forum (illus. 59), it summed up all the national humiliation of the Hebrew people. This famous golden candlestick has never yet come to light in excavations. Probably it was melted down to make Roman coins. But we have a good picture of it and of other treasures planned by artistic David, father of Solomon the builder, in I Chron. 28.

IN PEASANT HOMES

Homes in Bible times were so dark, most of them windowless, that tiny clay lamps were a necessary household equipment even of very poor people, who made their own of near-by earth. At night, they kept one burning on a stand in the room shared by the entire resting family. Or in a niche cut in the rock-cut chamber. Hence

Christ's allusion: "No man, when he hath lighted a lamp, putteth it in a cellar, neither under the bushel, but on the stand, that they that enter may see the light" (Luke 11:33). It also enabled those inside the house to identify whoever might enter. Jesus loved light. He used it time and again as a symbol of goodness, calling himself the "light of the world" and urging men to let their light shine in a darkened world, "as when the lamp with its bright shining" is luminous. "He that followeth me . . . shall have the light of life" (John 8:12).

TYPES OF LAMPS

The lands of early Bible times have supplied us with countless specimens of lamps, the oldest form of which was a saucer of clay, pinched at one spot to receive a wick and curled at its sides to hold the oil. René Dussaud, in his *Monuments Palestiniens* traces their evolution from early Phoenician terra cottas down to Roman, Greek, and early Christian types, whose shape becomes more oval, heavier, and more closed in, with a little tail-handle. The authors' collection contains a small clay lamp secured at Sychar, beside whose well Jesus talked with a woman of Samaria; one from Jericho; another found in a Roman well at Jerusalem during a recent excavation for a new house (illus. 56); and still another with the handle in the form of a Christian cross (illus. 57). Illustration 55 pictures a rare four-socketed candelabrum found down a well at Nob, where it may have been made in the era of King David. This, and also the foot-lamp shown in illus. 58 are in the collection of Mrs. Barbara Bowen of Brooklyn. The latter makes clear Ps. 119:105:

Thy word is a lamp unto my feet,
And light unto my path.

Such a foot-lamp was carried on a stick held above the pathway.

Lamps are kept burning over the traditional site of the Bethlehem manger in the grotto of the Basilica of the Nativity and in many other sacred shrines in Palestine, such as the romantic, history-en-

crusted Church of the Holy Sepulchre in Jerusalem. These lamps, often of lacelike silver filigree, have come from many creeds of the Christian faith and have often been the cause of quarrels. The Crimean War is supposed to have originated in a feud about how many lamps the Russians and how many the French were entitled to light over the silver star in the paving of the grotto of the Nativity.

ANTIOCH YIELDS

The huge volumes of reports from the excavations at Antioch on the Orontes include an article by F. O. Waage on lamps found in this city associated with Christian beginnings. He works out a family tree of clay lamps, from the light-buff clay early Syrian ones down to Roman and Hellenistic lamps covered with a poor quality of red glaze. He calls attention to some squat-handled Ephesus types; others trimmed with herring-bone patterns pressed into wet clay; and still others with little busts of Isis and Serapis, goddesses whose cults characterized Antioch. We trust that later excavations will yield early Christian varieties.

THE CORINTHIAN COLLECTION

In the little Museum of Corinth, given by an American, Ada Small Moore, in memory of her father, we have marveled at the sequence of clay lamps, showing the distinct evolution of design from the sixth century B.C. down through the Byzantine Christian period. The basic principle is the same in the entire group, with variations only in the nozzle for the wick, the shape of the bowl and cover, and the size and shape of the handle. Greek, Hellenistic, late Roman, and early Christian lamps at the Corinth Paul knew make a glowing procession of art clay. An embarrassing wealth of Greek lamps was found in the Agora of Athens, excavated for several years just prior to World War II. By 1939 a total of 3,578 lamps from all periods beginning with the seventh century B.C. and ending with Byzantine times (A.D. 300-600) had been recovered. We trust they have not again been scattered or buried in devastation of war.

FROM UR, EGYPT, AND POMPEII

One of the earliest lamps yet recovered from "buried history" is the alabaster hedgehog from Ur, home of Abraham before his journey to Palestine. It dates from c.3000 B.C.—more than a millennium before the era of the Patriarch—and is now in the University of Pennsylvania Museum.

Ranking high in art lamps of all lands is the famous alabaster lamp of Tut-ankhamun we have admired in the Cairo Museum. The three graceful cups of this gem of opaque light represent an open lotus and two buds.

A certain amount of light, as well as heat, was emitted from bronze braziers, one of which from first-century Pompeii is in the Naples Museum. When Peter "stood by the fire warming himself" during the trial of Jesus (John 18:18), some such brazier to contain the charcoals probably was used in the courtyard of the high priest. Jeremiah, the Hebrew prophet, wrote in the sixth century B.C. about "the fire that was in the brazier" of Jchoiakim, King of Judah, in which the scroll of the scribe Baruch and the prophet was tossed and destroyed (Jer. 36:17). The ruler did not fancy what was contained in it concerning the evil about to come to the kingdom at the hands of the Chaldean invaders.

METAL-ART WORK

In addition to the famous golden objects mentioned in *Jewelry*, page 270, the nations we call Bible lands turned out some amazing metal-craft work. Among the Sumerians, royal armor brought the metal-workers to their peak of perfection. Their superb golden "Ram Caught in the Thicket" appears in illustration 46. Egyptians, too, fashioned arms of gold and electrum. Ingots of gold and of silver were found in a house-ruin at El-Amarna, new capital of young Akhenaton. For Tut-ankhamun everything in metal, from his famous golden-boat centerpiece, with its silver lunar disk and its lotus-trimmed pool to his golden toe- and finger-stalls, engaged the talent of his metal workers. For the queen they made shell-shaped golden cosmetic dishes, cosmetic spoons, and sil-

ver toilet boxes having shell-lids carved with a battle between a lion and a goat.

Hittites were so well known for their fashioning of articles from their Cappadocian silver mines in Asia Minor that they took their name from *Khatim*, or *Khatti*, meaning in Hittite "silver."

Phoenicians, copying the Egyptian technique of making hollow bronze casts, became so proficient with silver art objects that their platters have been found as far west as Spain and as far east as Nineveh, as Breasted pointed out in his *Ancient Times*. Such a platter, once in the Berlin Museum, showed a stream of water surrounding a rosette.

Syrian Antioch became famous not only for mosaics, but for its animal-footed bronze tripods holding basins which could be raised or lowered ingeniously. It was known, too, for its silver cups, handsomely carved; its bronze patera, or bowls; and its oenoche, or handled pitchers. The much-disputed "Antioch Chalice," thought by many to encase the original cup used at the Last Supper, may have originated in this city on the Orontes but probably not until the fourth or fifth century A.D. It depicts the young teacher, Jesus, surrounded by the parabolic vine and branches; and the ten figures of Apostles, or of the four evangelists and James the son of Zebedee and four leaders and Andrew. It is rated "one of the most significant pieces of early Christian silver in existence." Even if it does not bear a first-century portrait of Christ, as many have maintained, this wonderful silver treasure, probably from the hands of Syrian silversmiths, gives us a notion of the high standard of workers in metal in the ancient Mediterranean seaboard (see *The Biblical Archaeologist*, Vol. 5, No. 1, for detailed discussion of the Antioch Chalice). It is now owned by Fahim Kouchakji, who has generously allowed American cities to exhibit it.

Silver, gold, and electrum coins of great beauty were turned out by metal-workers of Greece, Asia Minor, and Rome from the sixth century B.C. Struck at first for the practical purposes of business (see Section 6), coins became in the hands of Greek artists some of the finest of ancient art, offered at temples among whose ruins they

are now found. Some of them carry the only extant portraits of famous persons of long ago. Others bear legends and myths of gods and records of military prowess (illus. 90). After Alexander the Great, gold and silver coins prove history. Greek cities expressed their rivalry in terms of Athens' silver "owls," the Pegasus-imprinted staters of Corinth, or Sicilian tetradrachms of Hieron of Syracuse (478-466 B.C.) carrying leaping dolphins and a charioteer crowned by Victory.

MOSAICS

We have already referred to the earliest known mosaics, at Sumerian Ur (p. 42).

The mosaic floors and panels we associate with early Christian and Byzantine art in Palestine, Syria, Egypt, Greece, and such Italian Christian art centers as Ravenna had a very early beginning, going back more than 4,000 years from our day of inlaid-tile bathroom floors and villa patios.

Mosaics are simply tiny squares or cones, tesserae, of varicolored marble, limestone, or semiprecious stones, set in some medium such as bitumen or plaster, in geometric designs or patterns that tell a story of heroes, animals, seasons, or flowers. They are one of the most durable parts of ancient structures and often are the only surviving vestige. Mosaics remain at the Tabgha Church of the Multiplying on the shore of the Sea of Galilee (illus. 65); in the imperial palaces of early Byzantine emperors, such as Constantine and Justinian, along the Turkish Bosphorus; and in sixth-century churches at Jerash in Transjordan. Never have mosaics told more brilliantly beautiful Christian stories than in the newly uncovered Byzantine wall and apse mosaics of Sancta Sophia at Istanbul.

Proof of the Roman flare for mosaic floors with magnificent pictorial art we came upon one day unexpectedly in the squalid village of Beit Jibrin on our way to Lachish. In this ancient town (Mareshah) once fortified by the Hebrew King Rehoboam, between Hebron and Gaza, we saw the finest mosaic floor in Palestine, with brilliant peacocks, bunches of grapes, ladies' medallioned heads depicting the seasons, leopards springing into action, and the

usual geometric knots seen in modern linoleum rugs. Was it once part of some Hellenistic villa?

We have already referred to Palestinian mosaic floors at Beit Jibrin, Tabgha, and Jerash. We must also indicate the sumptuous "gorge" of more than 100 mosaic floors excavated at Syrian Antioch, with much more mosaic beauty yet to be uncovered. These findings of the Princeton University Expedition, reported in *Antioch on the Orontes*, edited by Richard Stillwell, offer great resources of pictures showing the mosaic art in the young Christian centuries of this city where people were first called "Christians." Antioch may have been the home of Luke, himself accredited with being no inconsiderable artist.

Antioch had been founded in about 300 B.C. by Seleucus Nikator, a Macedonian cavalry general of Alexander the Great. As C. R. Morey points out in his volume, *The Antioch Mosaics*, the array of this type of art in the city and at near-by Daphne is simply bewildering. Their costly presence bespeaks the extravagance of this center where some of the first Christian missionary efforts of Paul, Luke, and Barnabas were expended. Most of the floors are from villas and baths; others, from a few early Christian structures. We hope that when the vast excavation of mosaics at Antioch can be completed, we shall have at our disposal more from the first Christian centuries.

We who have seen floor mosaics in many centers in Palestine and Transjordan are impressed by the similarity of certain designs. This is explained by the fact that companies of craftsmen traveled from city to city, and the available pattern books were used by all. The beautiful geometric interlacing knots, borders, sunbursts, and conventional designs we were privileged to see in the old Constantinian floor of the basilica at Bethlehem (illus. 66) during repairs a few years ago, we have noted in many other places.

What did Ezekiel mean when he referred to the merchant city of Tyre as walking up and down "in the midst of the stones of fire" (Ezek. 28:14)? Was he referring to the rich red-purple of the harbor rocks dyed with royal tones from the little murex shells native to the waters off Tyre? Or did he visualize richly con-

structed mosaic floors, characteristic of kings and princes whose palaces and villas all over the Mediterranean world were paved with tesserae of onyx, marble, lapis lazuli, and other semiprecious stones?

A glimpse of the Persian mosaic paving for which ancient Iranians were noted gleams from the first chapter of the Book of Esther. Describing the beautifully decorated interior of Xerxes' palace at Shushan (Susa), with its garden-court hung with cool white, blue, and green cloth, the writer tells of gold and silver trimmed banquet couches "upon a pavement of red, and white, and yellow, and black marble." Such mosaics of marble we have seen in seaside villas of Italian Herculaneum built four centuries later.

POTTERY

AN ALL-MEDITERRANEAN ART

The making of pottery is one of the oldest crafts in all Bible lands. From the pre-Flood sherds (clay fragments) of Ur in Sumeria, which you may see in the University of Pennsylvania Museum, down to pottery made in Nazareth of Galilee today to carry water from Mary's Well, we read the tastes and destinies of nations. There is no better exercise for cultivating the feeling of Mediterranean peoples than to visit native markets all the way around from Spain, Italy, and the French Riviera to Iran in quest of pottery. In dusty bazaars of Athens under the shadow of the Acropolis, where genuine red-and-black ware from the fifth century B.C. is still available; to the open-air markets of Balkan Bulgaria with colorful blue-and-red glazed peasant jugs; on to the intricacies of Egypt's "sûks" crammed with pots from all ages in history; and into the elegance of Palestine's Archaeological Museum where, in a new setting, ceramics from market places known to Jesus and Paul, are displayed—in all these alluring spots we may touch hands with the clever potters of past and present.

ARRIVAL OF THE POTTER'S WHEEL

When the potter's wheel was first discovered, said Sir Flinders Petrie, a new civilization dawned. Its introduction into



63. The Parthenon, sacred to Athena, on the Acropolis at Athens. A corner of the Propylaea entrance with Doric columns and triglyph decoration.

64. The Athenian Kerameikos Section, formerly the field where potters secured clay outside the Dipylon Gate. From the sixth century B.C. to the late Roman period, the road here was lined with tombs, some of which appear in this picture.





65. Detail from a mosaic floor depicting a basket of Syrian loaves and fish standing on tails, in the apse of the Basilica of the Loaves and Fishes erected at Tabgha (Bethsaida) in the fourth century A.D. (Matt. 14:17). (Mr. Schweig, Jerusalem)



66. Portion of floor mosaics laid in fourth century A.D., era of Constantine the Great at the Church of the Nativity, Bethlehem and rediscovered during repairs in 1934. Masonry at center is the "new" entrance to the Grotto of the Nativity.



67. Potter's kiln on Mediterranean shore in Lebanon.



68. A small red pot from Cyprus, with "combed" design characteristic of Bronze Age. In such a receptacle the Wise Virgins (of Matt. 25:4) carried their reserve oil.



69. Jar decorated with gazelles and stripes by predynastic (middle) Egyptian artists. (Metropolitan Museum of Art)



70. Red bowl, with inscription painted in white letters, excavated at Lachish in southern Palestine. The script on this bowl, from a tomb under the city, is believed to be a connecting link between the Sinai script and the Phoenician alphabetic writing from which our own descended. (Sir Charles Marston)



71. A Bethlehem art-craftsman carving mother-of-pearl objets d'art.

Egypt paralleled the beginning of history and the dynastic period (c. 3200-2800 B.C.). In the Stone Age men had sat on the ground, building up and hollowing with their hands masses of clay dug from river beds. Later they found they could better shape their clay vessels by turning them around in a hole in the earth. Illustration 69 shows a predynastic Egyptian jar decorated with gazelles and ostriches.

A potter's workshop of the Late Bronze Age (c. 1500 B.C.), excavated recently at Lachish in southern Judaea, contains a stone seat near a limestone pivot on which a simple potter's wheel once turned. Near it, says Millar Burrows, were potsherds worn smooth with use as tools which guided the shape of the revolving wet clay; also, clay and pebbles which may have burnished the products; and a sharp bit of bone which incised designs on the pots. A red bowl bearing an inscription in white letters has been found at Lachish in a tomb of c. 1295-1262 B.C. (illus. 70, reading inscription by inverting bowl). This writing is thought to form a connecting link between the Sinai script and the later Phoenician alphabet, from which we derived our own. Some critics, suggests Sir Charles Marston, believe it to be evidence that the Pentateuch was written in alphabetic script.

Burrows believes that the potter's wheel came into general use in Palestine during the Middle Bronze Age (from 1900 B.C.). The two-wheeled "kick" type may date from shortly before Christ's time.

It is claimed that a primitive slow-turning wheel produced the prehistoric Mesopotamian pottery referred to already. By 3000 B.C. the Copper Age workers at Tell Halaf in Mesopotamia were turning out what Théophile J. Meek calls "the very finest handmade ceramics of all antiquity," both technically and artistically. As for this claim, however, Breasted would disagree, claiming that Greek pottery is the finest the Mediterranean ever produced, from the standpoint of both draughtsmanship and ceramics. Others champion the eggshell-thin ware of Mycenaean Crete, which has been compared with what was made near Ras Shamra in Syria 1,000 years later—choice polychrome painted pottery. Crete was near enough the mainland of

north Syrian Ugarit to influence it. Some types found at Ras Shamra (Ugarit) resemble pottery fragments found at Jericho mound in the c. 4000 B.C. level. It is odd how places so far apart in time and space, inside the tiny Holy Land produced pottery showing such kinship.

A FAMILY POTTERY COOPERATIVE

By the primitive family-industry method people often engaged in a modest retail pot trade, as we saw one day along the coast between Beirut and old Phoenician Sidon, once famous for its glass. This scene answered many of our questions as to how ancient Palestinians made their everyday pottery and sold their surplus to passing caravans. In the basement of a flat-roofed stone house a few feet from the Mediterranean, adult members of the clan were busy, while a donkey tethered near the well stood ready to transport finished wares to market (illus. 67).

The eldest son stood by the long work-table, kneading wet clay as a wife does her dough. Two men had previously washed out its pebbles and had done preliminary foot-kneading and "wedging" by tossing the clay to drive out air. This potter had been kneading that one lump for almost two hours and would soon turn it over to his brother in pieces which he would squeeze off one at a time for jars. The brother was whirling the potters' wheel with his left foot, using his hands to give desired shape as he built up the water pot and kept the mass soft by frequent pourings-on of water. The slightest manipulation of his fingers changed the shape instantly. After sufficient turnings on the upper wheel, or "table," the potter thrust his forearm into the wet mass to hollow it out. Then he dried it a bit and returned it for further modeling, adding an extra lump of clay to reinforce the bottom so that water would not leak when its owner took it to the well. Satisfied at last, he called his children to dry it in the sun, preparatory to kiln-baking.

This scene is duplicated today in many villages where homes turn out wares such as Mary of Nazareth used. The poorest modern pottery we have seen was at Gaza—crude red-and-black ware.

Usually even the cheapest cooking vessels in Bible times bore a design, if nothing more than parallel grooves scratched around the neck or on the handle with sharp stones or flint while the clay was soft. Twisted cords pressed around a vase made a pleasing rope design. Knives and combs made zigzag patterns popular in the Bronze Age (illus. 68). Sticks cut with semicircular ends made half-moons. Many potters painted their wares after the first baking, outlining with black or brown their designs of men and women, animals, scenes, circles, squares, key, and scroll. Then they baked the pots again.

Ancient Egyptians learned to coat their clay pottery with liquid glass called "glaze." Generally they used a brilliant blue for which they became famous. Sometimes several glazes were combined or fired one on top of another with marvelously beautiful results. To mix glazes soda, lead, silver, copper, or tin is required. Green tints require oxide of copper and iron. Turquoise comes from copper alone, deep-blue from cobalt, and lovely purple from manganese. One of the finest specimens of Egyptian glazing found from ancient times is the scepter of Amenhotep III. Its stem is 5 in. in diameter, and it is 5 ft. high. This pottery marvel from c.1412-1375 B.C. is glazed with a coat of brilliant blue from top to bottom. As with cloisonné work, pottery-glazing requires great skill to fire the coating of glasslike substance without softening the base.

It was a great day when potters discovered that they could make stronger pots by firing or baking them. This they did in open ovens or holes in the ground, and later in dome-shaped mud ovens as high as a man. These ovens, or kilns, held many pots at one time, placed on a shelf over the heat and shielded from wind which might mar them. Sometimes potters burnished the baked clay pots with bits of shell.

THE KERAMEIKOS, OR POTTERS' SECTION

Pottery-making centers had their workshops at the edge of town, where open fields were available for drying vessels in sun and kiln. The most famous potters' quarters were the Kerameikos at Athens,

which gave the word "ceramics" to the whole art of clay-made products.

Athens had two Kerameikos sections; one for selling, near the great Stoa of Attalos or shopping section of the Agora (market-place), where Paul walked, discussing religion with the best Greek minds of his day; and the manufacturing Kerameikos out on the edge of Athens, on the way to Corinth, near the Dipylon Gate. The Potters' Field, used as burial ground by many cities, dates from the Athenian Potters' Field, where today we see vestiges of thousands of tombs erected through the centuries. These were not only for the poor and "strangers," whose graves at Jerusalem were in the "Potters' Field" purchased with Judas' thirty pieces of silver by the chief priests (Matt. 27:7). They were for wealthy Athenians, who afforded such elegant tombstones as we see in illustration 64.

Attic pottery, shipped for centuries up the Black Sea and to colonies east and west and to eager neighbor markets, built the prosperity which fruited in the golden age of Greek art during the fifth century B.C. This period parallels the period when Jews had returned from Babylonian captivity to rebuild Jerusalem.

The Kerameikos of Corinth was almost as noted as that of Athens and was located in the west quarter of the merchant city, near the weavers' looms where Paul toiled at tent cloth with Priscilla and Aquila. The longest shopping arcade of the Greek world was at Corinth, where many a tiny *stoa* was jammed with water pots used by Corinthians to place under their famous Triglyph and Peirene fountains (illus. 234) and also to ship to distant parts. Corinthian ware was easily distinguishable from that of Athens, her rival in red-and-black painted pottery as in matters of war and politics.

The Museum at Corinth contains an extraordinarily complete series of pottery from earliest prehistoric times to the Byzantine Christian era. Pieces spoiled in the firing—and from being stacked one inside another in the kiln—are included, together with rough clay stands on which were placed the pots while being fired. Lumps of coloring matter indicate pigments used in painting.

NATIONAL AND REGIONAL RECORDS
IN PALESTINE POTTERY

Although Iron Age Hebrew ware was slow in reaching anything like the quality of Bronze Age Canaanite pottery, Jewish craftsmen did "take lessons" down the centuries from many tutors whose wares were imported from Syria, Egypt, and the Aegean.

Since men were living in the Early Bronze Age in caves on the slope of Megiddo overlooking the Plain of Esdraelon opposite Nazareth, boyhood home of Jesus, it is not surprising that "Esdraelon culture" pottery has been excavated here. It is gray-black ware, related to what has come to light at the opposite end of the plain at Beth-shan. This "regional pottery," some of which has a grain-wash imitating wood, and some, bands of cream, orange, red, and brown, is distinctive. Many of the pots, says Engberg, have cylinder-seal impressions giving clue to their date.

The matter of these "date line" imprints stamped on pots while still wet is seen in illustration 68. This is a good example of how a pottery fragment, found in ruins of a definite occupation level in an excavated mound, tells us the date of that layer. The pot, bearing a two-winged creature, a scroll, and the stamped name of a town, was found at Lachish in southern Palestine. It was made at Hebron during the Jewish monarchy (1000-586 B.C.). The winged creature is typical of "royal pottery" stamps. Such ware as this gray earthen fragment with light-red slip was stamped to show that its town had sent to the king at Jerusalem its quota of pots filled with oil or wine. Or the stamp may simply mean that the piece was wrought in the royal pottery town of Hebron. Ziph and Shocoh, also, were pottery centers, even as Dresden and Bohemian Prague were renowned for fine china in the modern age.

Light on the meaning of this winged scroll may appear in Zechariah's reference (5:1) to seeing a "flying roll" twenty cubits long, going through the earth, cutting off everyone who swore falsely, stole, or violated other commandments of God.

Three jar handles marked "belonging to Eliakim, steward of Yokin"—one found by

Grant in 1930 at 'Ain Shems, and two by Albright at Tell Beit-Mirsim—have brought us very close to the young King Joiachin who was carried off to Babylon by Nebuchadnezzar in 597 B.C. Possibly the Eliakim of the jar handle administered the affairs of this king-in-exile, of whose life in Mesopotamia hundreds of tablets recently found at Babylon give us many details.

Bits of broken pottery tossed from kitchens tell us more about the culture and the dates of successive occupation levels of towns in Bible lands than anything else scientists have discovered. These "unconsidered trifles" of everyday life are worth more than the objects of gold that have gleamed in new sunlight under the spade of archaeologists. Cheapest of household equipment, they reveal the tastes, the materials, the tools, and the fates of people over a period of 7,000 years. When Sir Flinders Petrie in 1890 worked out his system of dating layers of occupation by the sequence of broken pottery found in various levels of Tell el-Hesi mound in southern Judaea, he laid the foundation of modern archaeology, even if he made a great error in identifying the mound as Lachish. These unattractive, often undecorated, wares, as he compared them with already dated pottery of Egyptian levels and with imported pottery from Syro-Palestinian sources, and as he saw them sometimes accompanied by scarabs whose dates he knew, set up a chronology which has been used in every other mound excavated in Palestine. In six weeks he examined 60 ft. of debris in Tell el-Hesi which gave up 2,000 years of history. On the basis of his brilliant investigation, every archaeologist working in the eastern Mediterranean today, whether at Asiatic Troy, or Palestinian Jericho where the Garstangs examined more than 40,000 pottery fragments, uses Petrie's yardstick of pottery fragments. When the University of Pennsylvania dug at Beth-shan on the Plain of Jezreel, they worked out an accurate chronology of Palestine by successive layers of pottery.

Since the pioneer work of Sir Flinders Petrie with pottery-dating, the skillful scholarship of Père Vincent, Clarence Fisher, and William F. Albright has

worked out their analyses of pottery to a very fine science, including microphotography, chemical analysis, and reproduction of ancient types for laboratory study. For those interested in the involved study of Palestinian pottery, we suggest such reference works as Fisher's *Corpus of Palestinian Pottery*; *Notes on the Chalcolithic and Early Bronze Age Pottery of Megiddo*, by Robert Engberg and Geoffrey M. Shipton; Woolley's *The Development of Sumerian Art*; Petrie's *Wisdom of the Egyptians* and his early *Egyptian Decorative Art*; R. Horace Jenkins' *Practical Pottery*; Pendlebury's *The Archaeology of Crete*; and G. Ernest Wright's *Pottery of Palestine from the Earliest Times*. And for current news about pottery just now being turned up on Bronze Age sites in Transjordan, consult Nelson Glueck's *Transjordan Letters*, *Bulletins of the American Schools of Oriental Research*, and *The Biblical Archaeologist*. Glueck is very enthusiastic about tremendous "cartloads" of beautiful pottery of the Early Bronze Age (c.2100 B.C.) site near the village of Deir es-Sana—potsherds from 4,000 to 5,000 years old, far finer than modern ware of western markets. He gives credit to Early Iron Age sherds from the thirteenth or twelfth century B.C. for helping to locate the site of biblical Ramoth-Gilead, near the present Transjordan town of Remtha in northern Gilead. Here at an important intersection of roads near Syria plains are wide and level enough to have accommodated chariots of the Syrians as they met the combined forces of King Ahab of Israel and King Jehoshaphat of Judah (II Chron. 18). Glueck also glows over the pottery of controllers of Transjordan caravan trade in the century of Christ. "Who that has handled the pottery of this gifted Nabataean people in their lonely highlands can forget it?" he exclaims. "Some of it is paper-thin, trimmed with palms and flowering vines. Some was incised with sharp tools while still wet."

The Psalmist's reference to his strength being "dried up like a potsherd" (22:15) or a "broken vessel" (31:12), and Jeremiah's description of his visit to the house of the potter, who was fashioning wares on his wheel and tossing into the discard heap vessels marred in his hands (18:2-4),

put us at once in touch with the fact that people in Palestine were as intimate with their clay pots as modern families are with the aluminum or enamel vessels which are used three times a day in their kitchens. Prior to the period of the judges and the monarchy, Hebrews had retained their desert habits of using animal skins to hold water, milk, and wine. We have recently seen water sold in Jerusalem from goatskin sacks. The first reference in the Bible to earthen pottery comes late. It tells how friends brought to fugitive King David, about 1010 B.C., gifts of clay vessels (II Sam. 17:28). Jeremiah used "clay in the potter's hand" to picture Jehovah's influence over Israel; Paul referred in "Romans" to the privilege of the potter over the clay, "from the same lump to make one part a vessel unto honor, and another unto dishonor" (9:20), even as God destines certain personalities to higher careers than others.

People in Bible times often made not only their pots but the clay stoves on which they steamed savory food. One day we saw a village "Martha" walking along with her stove and its vessels on her head as she went to cook for a sick neighbor in Bethany.

Even if Hebrew pottery in Palestine was never of outstanding art excellence, various cultural groups living in that little land deposited history in their clay products. By pottery excavated in the five successive cultural levels at north Syrian Ras Shamra, Schaeffer has been able to trace influences of Nineveh, Susa, Turkestan, and other ports-of-call along the caravan routes. He found from the middle of the third millennium B.C. a distinctive simple "Canaanite pottery," seldom using painted designs but having a red or black luster. It is trimmed with combed designs which helped the excavator to date it as Phoenician (see combed-ware red vase in the author's collection, illus. 68). The second level at Ras Shamra shows pottery contemporary with Twelfth Dynasty Egypt (c.2000-1780 B.C.), when the Phoenician temples at the great Ugarit port were dedicated to Baal and Dagon. This was the age when wide-roaming Phoenician sailors were bringing to Ras Shamra perfumes and spices from the Red Sea, and

exporting from northern Syria wood, copper, arms, and utensils, as René Dussaud points out in his *Les Découvertes de Ras Shamra*. Jericho has yielded a pottery record of 6,000 years. And Ai, in central Palestine, ruined 4,500 years ago, has enriched our knowledge of potsherd.

Philistine pottery from the time of David and Solomon has been found in the Shephelah—tan ware, painted with bands of red and brown in spirals, or trimmed with painted birds. This has been classed as "the latest important group of painted pottery in Palestine." Some of it is in the Museum of the University of Pennsylvania. And from Ras Shamra in the fourth millennium comes light, as Claude E. A. Schaeffer indicates, on polychrome egg-shell ware.

Egyptian pottery, called "sad stuff" by admirers of the Cretan pots, was always finding its way into Palestine. Much of this was undecorated—suited for heavy everyday use at village wells, such as we see now at Cana where Jesus once said, "Fill the waterpots with water." And "they filled them to the brim."

Persian ware doubtless was used in palaces of the Persian occupation level at Lachish in southern Palestine—and we recall that in color, design, and pleasing shapes Persian luster pottery was never excelled.

Romans were too busy shipping legions to Palestine in the era of Jesus to bother exporting their pottery so far, unless cargo space was abundant. Many specimens have been found in Palestine and Syria, however. The earliest Roman pottery seems to have been the black Etruscan ware of the eighth century B.C. From the sixth to the second centuries B.C. Roman potters were using Greek models for their rose-red vases and jugs, thinly glazed and velvet-smooth to touch.

Greek pottery from its best period, about 500 B.C. or earlier, has been excavated at Tell en-Nasbeh (Mizpah) in Palestine—both Attic black ware and Attic red-figured specimens. These fragments help date other pottery found with them on this Palestinian site, as discussed in *Bulletin No. 83, American Schools of Oriental Research*.

One accessible American collection of

Greek pottery of various periods in Athens and at Corinth is in the Museum of the University of Pennsylvania, where we have seen a sequence of choice vases, pitchers, and bowls beginning with Greek geometric designs from 725-675 B.C.; early Corinthian ware of 625-600 B.C., the period of Jeremiah's reforms in Judah and the Deuteronomic revision of the Hebrew laws; Attic red-figured pieces from 490-480 B.C., including a fine Theseus-and-bull design from Marathon. Hoards of pottery were found during the excavation of the Agora at Athens. They had, in time of national stress, been tossed down wells or stored near temples.

No scholar can evaluate pottery unless he places sensitive fingers upon what the sensitive hands of the original potter has wrought. Photographs are not enough. Only as contact is made with the texture, significant handles, and rims is one able to feel the ancient art of the potter, the first of whom wrought possibly before 6000 B.C. What a happy day that must have been when the first clay artist who tied a palm rope about his pot, to hold it together while it dried, found that it left a beautiful imprint of decorative rope-twist! For millennia afterwards, this pattern was used, together with trickle-borders, rope moldings, scallops, intersecting lines, and triangles.

TILE CERAMICS

Pottery was used not only to store foods, but for early people its fragments were letter-paper on which they wrote business and military translations; an example is the famous eighteen Lachish Letters from 597 B.C. (see p. 177). Too, voters at Athens balloted on ostraca, or broken bits of pottery.

The final chapter of a potsherd comes when a fellah (farmer) tosses it with others onto his threshing-floor and crushes it with huge stones to make powdery cement. "And he shall break it," says Isaiah, "as a potter's vessel is broken . . . in pieces without sparing; so that there shall not be found among the pieces thereof a sherd wherewith to take up fire from the hearth, or to dip up water from the cistern"—two more uses for the

humble clay product, shovel and dipper.

Ceramics in Bible lands include the making of baked decorated tiles for ornamenting buildings.

Tiles bearing the name of the famous tenth Roman legion, stationed in Palestine, have been found.

SCULPTURE

STONE FIGURES

As in so many other realms of art, the very ancient Sumerians led the way in portrait sculpture. The famous diorite seated statue of Gudea of Lagash has a serene poise and a haunting majesty which challenges artists across 5,000 years to excel it. This wonderful Sumerian prince who restored the Temple of Ningirsu-E-Ninnu was once a scribe. By his own dynamic energies, which appear in the strength of his countenance, he rose to political leadership. The masterpiece shows him wearing the old Sumerian skirt, across which are carved cuneiform sentences. Like later Egyptian artists, the sculptor of this gem poured all his ability into the facial expression, deeming the body unimportant.

Egypt has left us many priceless originals of sculpture from the stone which was plentiful in her land, and from masses of diorite and other materials from wood to alabaster. Even the Sphinx on the desert at Gizeh which was originally a bit of rock headland on the sand, was carved with the head of Khafre, builder of the Second Pyramid. This head alone is 20 ft. high, looking down in its flat-nosed battered condition, upon a re-excavated pyramid temple where food, clothing, and "creature comforts" destined for the use of the pharaoh in the hereafter were stored, while his body slept in the desert pyramid, connected by impressive causeways with the royal city on the Nile.

One of the most noted pieces of Egyptian sculpture of all dynasties we photographed in the Cairo Museum; it is the statue of the conqueror Tuthmosis III (illus. 42). Note his strong but smug and smiling countenance, his short Egyptian kilt, his tall royal hat. The uplifted,

inspiring face of King Khafre of the Fourth Dynasty, under the simple folded headcloth of the early Egyptians, behind which the protective falcon-god is seen, looks to be a true portrait of the king-builder of the Second Pyramid (illus. 25). When we look at this diorite portrait of Khafre, we see what the face of the Sphinx looked like when it was new, before the nose was flattened by Moslem iconoclastic rage.

Egyptian sculptors, who were slow in developing perspective, did not feel the incongruity of using a front view of the face with a side view of the body. The artist cared more for depicting the outstanding traits of his subject than for mastering "the law of frontality." His art was conceptual. He depicted what he thought rather than what he saw. This would have greatly shocked the perfect artist, Phidias, master of fifth-century sculpture at Athens.

Other familiar Egyptian masterpieces of sculpture include the charming portrayals of Tut-ankh-amun in golden glory (illus. 154); the abnormal-headed monotheistic dreamer, Akhenaton; the slender-necked Nofretete, one of the finest portrayals of a woman's head from ancient times; and the seated statue of Queen Hatshepsut in the Metropolitan Museum of Art. Yet none of these make a greater appeal than the sincere integrity of the man and wife shown in amazingly lifelike statues of the General and High Priest, Ra-hotep, and his wife, Nofret, from Fourth Dynasty Heliopolis. These tell us much about Egyptian character. The man, with swarthy skin and white loincloth, and his wife, with paler face, paint-enlarged eyes, straight-bobbed wig, flat faience-and-gold necklace, and sheer, white, straight garments, are now encased at the Cairo Museum.

STONE RELIEFS

We have already referred to the vast extent of sculpture lavished by artists decorating the Great Hall of Darius (522-485 B.C.) at Persepolis (illus. 210) and the palace of Xerxes (485-465 B.C.). The reliefs cut in rock above the royal road from Babylon to Ecbatana with inscriptions in three languages—Babylonian, Elamite, and Old Persian—present a pic-

ture-story of Persia in the late sixth century B.C., with king, satraps, and priests sacrificing to Ahura Mazda, god of light. The unraveling of these three key-inscriptions is another romance, related to philology.

With the finest of all ancient statues, the Greek, everyone is too familiar to warrant space for them here. We pause to pay tribute to never-excelled perfection of a Winged Victory, the gold-and-ivory Minerva which graced the Acropolis when the Parthenon was new, and the galaxy of gods and heroes in the Parthenon frieze, a few of which still remain where Phidias placed them despite the hoard carried to London by Lord Elgin.

Roman sculpture, whether in bronze or marble, was less well proportioned than Greek. Even the notable seated figure of the Roman Matron, who may be Agrippina, mother of Nero, appears to have too small a head. And some of the most famous "Roman" pieces are really from the hand of Greek masters or their pupils. This is true of the Laocoön group, the Farnese Hercules, and the stately busts of mantle-clad Marcus Aurelius and Antoninus Pius. The Resting Hermes and even the famous bronze horses from San Marco façade in Venice, which formerly graced Nero's box, may have sprung from the skill of Greek Lysippus in the fourth century B.C.

SCULPTURED SARCOPHAGI

The sarcophagus of Ahiham found at Byblos, which we have been privileged to see in the Beirut Lebanese Museum, is thus far the most ancient product (c.1200 B.C.) of Phoenician art according to Rostovtzeff. In the beautifully chiseled, neat, clear letters of the Phoenician alphabet carrying an imprecation against anyone venturing to disturb this sarcophagus, we

were able to recognize our letters o, g, etc. This is one of the oldest specimens of Phoenician writing extant. It is the forebear of the Greek and our own alphabetic writing. Even more interesting than the inscription are the well-carved lions on the lid and a portrait of King Ahiham himself, dressed in a heavy, long cloak with sleeves, seated on a high throne as his feet rest on cushions. In his right hand he holds a cup, and in his left a lotus flower. Seven men of the royal court are shown in front of the king; and on the opposite side of the stone sarcophagus, which was once a part of local hills, a procession of men and women bearing tribute gifts. The short ends are carved with scenes of Ahiham's funeral and show men and women wailing. Some of these have an Egyptian look.

The anthropoid sarcophagi found in the hillside burial place above Sidon have considerable art displayed in the carved heads of these Phoenician stone tombs. The so-called "sarcophagus of Alexander," now in Istanbul Museum, was found near Sidon by a missionary named Ellis.

The Cyprian sarcophagus of the sixth century B.C., in the Metropolitan Museum of Art, shows a beautifully carved chariot procession having mixed Phoenician, Babylonian, and Egyptian atmosphere—quite natural in this island off the Syrian coast where trade routes intersected. Its lid is carved with winged sphinxes of Mesopotamia and Egypt; its ends carry four lewd, naked goddesses of fertility common to all Bible lands on their lowest worship level.

WEAVING

For this important craft of Bible lands, and for Dyeing, see Professions and Trades, page 353.

ADDITIONAL BIBLE REFERENCES

Note—The paucity of allusions in the Bible to articles pertaining to arts and crafts reveals the cultural poverty of the Hebrews

in these respects in comparison with their neighbors.

"And he reared up an altar for Baal in the house of Baal, which he had built at Samaria" (I Kings 16:32)

"he provided him treasuries for silver, and for gold, and for precious stones, and for spices, and for shields, and for all manner of goodly vessels" (II Chron. 32:27)

"Their idols are silver and gold,
The work of men's hands.
They have mouths, but they speak not"
(Ps. 115:5)

"they shall go into confusion together that
are makers of idols" (Isa. 45:16)

"I will build me a wide house and spacious chambers . . . and windows; and it is ceiled with cedar, and painted with vermilion" (Jer. 22:14)

"washings of cups, pots, and brasen vessels" (Mark 7:4)

"a golden pot holding the manna" (Heb. 9:4)

BIBLIOGRAPHY

- Albright, William F., "Syro-Palestinian Archaeology," *The Haverford Symposium on Archaeology and the Bible*, American Schools of Oriental Research, New Haven.
- Crowfoot, J. W., and Grace M., "Early Ivories from Samaria," *Samaria-Sebaste—Reports of the Work of the Joint Expedition*, Vol. 2, Palestine Exploration Fund, London.
- Dussaud, René, *Découvertes de Ras Shamra et L'Ancien Testament*, Guenther, Paris.
- Dussaud, René, *Monuments Palestiniens and Judaïques*, Leroux, Paris.
- Frankfort, Henri, *Archaeology and the Sumerian Problem*, University of Chicago Press, Chicago.
- Gardner, Helen, *Art Through the Ages*, Harcourt, Brace and Company, New York.
- Garstang, John, "The Heritage of Solomon," Williams and Norgate, London.
- Harden, D. B., *Roman Glass from Karanis*, University of Michigan Press, Ann Arbor.
- Herzfeld, Ernst E., *Iran of the Ancient East*, Oxford University Press, Oxford.
- Kraeling, C. H., "The Nabataean Sanctuary at Gerasa," *Bulletin No. 83*, American Schools of Oriental Research, New Haven.
- Lawrence, T. E., *Letters*, Doubleday, Doran & Company, Inc., New York.
- Lutz, H. F., *Egyptian Statues and Statuettes*, J. C. Hinrich, Leipzig.
- McCown, Chester C., *The Ladder of Progress in Palestine*, Harper & Brothers, New York.
- Morey, C. R., *Early Christian Art*, Princeton University Press, Princeton.
- , *The Mosaics of Antioch*, Longmans, Green and Company, New York.
- Petrie, Sir Flinders, *Egyptian Decorative Art*, G. P. Putnam's Sons, New York.
- Riefstahl, Elizabeth, *Toilet Articles from Ancient Egypt*, Brooklyn Museum, Brooklyn.
- Rostovtzeff, M., *A History of the Ancient World*, Vol. 1, Clarendon Press, Oxford.
- Steindorff, George, and Seele, Keith, *When Egypt Ruled the East*, University of Chicago Press, Chicago.
- Stillwell, Richard, *Antioch on the Orontes, The Antioch Mosaics (Excavations 1933-9)*, Princeton University Press, Princeton.
- Vincent, Père Hughes, *Canaan d'Après L'Exploration Récente*, Lecoffre, Paris.
- Waterman, Leroy, "The Damaged Blueprints of the Temple of Solomon," *Journal of Near Eastern Studies*, October, 1943, Chicago.
- Watzinger, Carl, *Denkmäler Palästinas*, J. C. Heinrichs, Leipzig.

BUSINESS TRANSACTIONS

The kingdom of heaven is like unto a man that is a merchant.

—Matt. 13:45

Introduction	Some Famous Papyrus Documents
Merchant Nations	Wooden Tables
Babylonians	Parchment and Vellum Records
Phoenicians	Money in Bible Lands
Aramaean	Old Testament Money
Greeks	Dawn of Coinage
Hebrews	Value by Weight
Merchants	Egyptian Money among Hebrews
Jesus and Merchants	Babylonian and Persian Money among Hebrews
Women Merchants in Bible Lands	Earliest Jewish Coinage
Shops	The Sanctuary Shekel
Bazaars or Sûks	New Testament Money
Storehouses	Palestinian
Small-town Markets	Varied Contents of a First-century Money-Till
Agora and Forum	Roman Money
Athens, Corinth, Rome, Ostia	Greek Coins
Famous Business Transactions in Bible Lands	Athenian Money, Corinthian Money
Contract of Solomon and Hiram of Lebanon	Hoards of Coins in Bible Lands
Alliance of Solomon and Hiram at Ezion-geber	Financiers in Bible Times
Types of Merchandise	Taxgatherers, Money-changers, Bankers, Usurers
Technique of Purchasing Real Estate	Identification of Coins Mentioned in New Testament
Business Correspondence	Measuring Units
The Letter-writer	Weights
The Desk of the Scribe	Assyrian, Hebrew, Egyptian, Babylonian, Phoenician, Greek, Roman
Clay Tablets	Scales
Cuneiform Writing	Ethics of Just Weight
Business Documents	Capacity Measuring
Historic Clay Records	Hebrew, Roman
Ancient Repositories	Linear Units
Seals	Babylonian, Egyptian, Hebrew, Roman
Cylinder-seals	
Jar-handle Seals	
Scarabs	
Ostraca	
Papyrus Documents	Additional Bible References
Hieroglyphic, Hieratic, and Demotic Writing	Bibliography

INTRODUCTION

Almost as soon as man became conscious of neighbors, he began to trade. For example, cave dwellers in the iron-colored

cliffs of Mount Carmel found that they had made more sharp flint knives than they needed. On the Mediterranean shore below, they saw men who were willing to

exchange for flint knives, shells coveted for necklaces and headdresses.

Stone Age men bartered amber and other natural materials for desired wares. When animal husbandry came in, value was measured in terms of oxen, sheep, cattle, and hides. With the dawn of agriculture, pots of meal and grain became units of price. In the Tell-el-Amarna Letters sent to Egyptian kings by various vassal rulers of the fourteenth century B.C., we read that the King of Cyprus wanted silver, oil, and "manufactured" goods in exchange for copper and wood.

MERCHANT NATIONS

BABYLONIANS

In the most ancient Babylonia, we know that merchants played an important role. Babylonia was one of the greatest merchant nations of antiquity. Her traders dispensed goods in local markets along canals and rivers; they also supplied desert folks with the necessities of everyday life, as market towns on the desert edge still supply nomads with the *sine qua non* of metal pots, woven goods, harness, arms, and implements. Babylonian merchants early became traveling traders who peddled not only their goods but their arts, language, and system of writing (illus. 74). Assyrian ingenuity devised the first drafts or checks on record—clay tablets, stating what each was worth in silver. The famous Egibi family of Babylonia and Assyria from the era of Nebuchadnezzar to that of Darius, issued clay business documents by the hundred, of which many have come down to us (illus. 78). They were the Rothschilds of their day, forerunners of the Genoese bankers of the twelfth and thirteenth centuries A.D. who financed trade and religious projects of the Crusaders.

The Hebrew prophet Nahum reported that merchants in Sennacherib's Assyrian capital were more numerous than "the stars of heaven." (Nah. 3:16).

Babylonian merchants carried their gods to lands as distant as the Black Sea shores, depositing them with their wares. Among them were Nannar the moon-god, Ea, Nabû, Nergal, the goddess Nin-Gal, and Enlil the "lord of lands."

Great syndicates of merchants not only controlled the trade routes intersecting at Palmyra, Damascus, Jerash and elsewhere; but from their profits they erected lofty temples and artistic colonnades in front of their shops.

PHOENICIANS

The other ancient merchant nation, *Phoenicia*, peddled the influential and sensuous goddess Astarte and the "Lady of Byblos" as far west as Italy. Merchants from the rock-cut city of Petra built temples in the Italian port of Putcoli, even as the Dalmatian traders of the fifteenth century A.D. established in Venice their Church of San Giorgio degli Schiavoni, which Carpaccio decorated with paintings of their patron, St. George.

Phoenicians, along the central part of the eastern Mediterranean seaboard, were among the first to ply boats between their land and Egypt, possibly before 2500 B.C. For many centuries there was constant intercourse by sea and land between these two dominating trader-nations. Phoenicians sailed as far west as Spain and perhaps Britain, looking for tin. All their contemporaries admired their business acumen. They would unload their cargo on strange sands; prospective buyers would advance to look them over; the Phoenicians would scrawl the price on the beach. Thus developed the system of numbers from which our own evolved.

The Hebrew prophet Isaiah referred to Phoenician traders as "merchants that pass over the sea" to replenish their stocks. These commercial people were in their heyday from 900 to 600 B.C. Isaiah called the traders of Tyre merchants that are princes (Isa. 23:8). The last book of the Bible sums up the status of Mediterranean merchants. Referring to traders of Rome, under guise of "Babylon," John of Patmos writes, "Thy merchants were the princes of the earth" (Rev. 18:23).

ARAMAEANS

From 530 B.C. on, *Aramaean merchants* thronged the Babylonian market places. They made their language the one of everyday affairs all around the Fertile

Crescent, from Babylon to Syria, writing their transactions in Aramaic (the language frequently used by Jesus) with pen and ink on fragments of pottery or on papyrus. They helped push out the difficult old cuneiform writing on clay.

GREEKS

Greeks were great merchants of sea-borne traffic among the islands of the Aegean, Ionian, and Black seas. They had trading posts in Egypt as early as 650 B.C. Their mercantile projects scattered not only their famous Greek pottery, oil, wines, and honey all over the Mediterranean world, but also colonies along the Euxine, in southern Italy, Sicily, and Asia Minor.

HEBREWS

Not much competition was offered by Hebrew merchants among ancient Mediterranean trader-nations. Canaanite merchants already possessed the field of trade when the Israelites began their occupation. The newcomers evidently preferred to let them continue their trade monopoly rather than enter this field of competition. The Phoenicians, who were the later Canaanites, were regarded as "the merchant people" (Zeph. 1:11). The words "merchant" and "Canaanite" were often interchangeable.

Jews used the middlemen to advantage while busy with matters of conquest and settlement. Solomon and his agents were the best-known Jewish merchants prior to the Exile. During the years of Babylonian exile Jews traded, copying to some extent, no doubt, the success technique of Babylonian merchants among whom they lived. Upon their return they worked together as a group, rebuilding their sector of the Jerusalem wall under Nehemiah's direction: "between the ascent of the corner and the sheep gate repaired the goldsmiths and the merchants." (Neh. 3:32). For the first time in their lives, the returned merchant-exiles had money in their pockets (see p. 139, Money). They rose to prominence during the Dispersion of the third century B.C. following Alexander's opening up of the eastern world and the decline of Persian restrictions. Jewish busi-

ness men were doubtless in all Paul's congregations at Corinth, Thessalonica, Antioch, Rome, and Ephesus. The city-minded preacher was himself a merchant of hand-woven sail and tent cloth. He knew the tricks of trade in ancient markets as well as did his trading colleagues, Priscilla and Aquila, Christian Jews who had been banished from Rome by Claudius.

MERCHANTS

Although there are many evidences of small shops in early Babylonia during the Hebrew monarchy, yet commerce centered about the person of the "traveling trader" himself. In I Kings 10:15 we read of Solomon's income springing not only from taxes but from "that which the traders brought, and traffic of the merchants." And in Prov. 31:24 we have a folksy picture of an itinerant Phoenician merchant arriving at the home of an industrious wife in an unnamed town—it might as well be Bethlehem as any other—to bargain for the hand-woven girdles made by this virtuous wife of an influential elder:

She maketh linen garments and selleth
them,
And delivereth girdles unto the merchant.

This custom of wholesale buyers circulating among rural settlements to gather up valuable home-craft wares persists in Mediterranean lands today. Merchants saunter from village to village after winter has produced large outputs from women's looms and needles. In exchange for hand-somely embroidered skirts and aprons, rustic traders offer coveted silver necklaces and earrings to be worn at festival contests among rival towns.

JESUS AND MERCHANTS

Jesus, reared in busy Nazareth where caravan trails coming from every direction met and exchanged their goods and their news, grew up with an awareness of merchant ways. These he reflected definitely in his parables. To him, the Kingdom of Heaven was "like unto a man that is a merchant seeking goodly pearls; and having found one pearl of great price, he went and sold all that he had, and bought

it," possibly from a man who had secured it along the Red Sea, in Arabia. In his parable of the slighted wedding invitation (Matt. 22:1-14) the Teacher tells of one guest who did not accept because he was looking after his merchandise. In his story of the businessman who gave talents of money to his employees to carry on while he went "into another country," Christ probably had in mind a wholesale merchant departing on an extensive trip (Matt. 25:14-30). The one servant to whom five talents were entrusted knew the schedule of arriving caravans and was able to make profitable deals, so that he doubled the amount left with him by his employer. The fearful one, however, to whom the wholesaler had left one talent to carry on deposited his capital in the ground, the only bank available. Luke 16:1-13 gives an interesting parable of a steward who worked on commission and mismanaged his employer's business.

When Jesus spoke of children playing at wedding and funeral in the market place (Luke 7:32), he remembered his own boyhood when he sat at Nazareth market watching merchants milling about at their bargains. He had compassion on laborers who, even at the third hour of the day, had not yet been hired for the customary shilling and sent into the vineyard. In places like the sheep market at the Pool of Bethesda, with its five porches (John 5:2-9), he met chronic invalids whom he enabled to walk and resume productive habits. He knew well the avid hunger for adulation on the part of those who walked in long robes in the market places.

Christ's own chief concern was to be about his Father's business (Luke 2:49).

WOMEN MERCHANTS IN BIBLE LANDS

In the earliest times of which we have records, we see women engaged in business enterprises, especially at the temples. A fascinating little tan clay tablet, owned by the Pierpont Morgan Library in New York, is labeled, "Sale of lands belonging to Babylonian priestesses, in the reign of Ammi-Zaduga, 2000 B.C." This was written in the era when forebears of Abraham were dwelling in the Sumerian city of Ur.

The peace-loving but energetic Egyptian Queen Hatshepsut, wife of Tuthmosis II and later ruler in her own right, was the "Queen Victoria" of her empire in the fifteenth century B.C. This most interesting woman, whose mortuary temple at Deir el-Bahri at Thebes is memorable, dispatched merchant ships as far as the enigmatic Land of Punt in tropical Africa. This famous expedition is pictured on a colonnade of her temple court. It shows her bartering agents offering gold collars, bracelets, poniards, battle axes, and glass beads to the people of Punt, from whom they asked immediate delivery of ebony, ivory, myrrh, incense, chests of gold, apes, hounds, leopard skins, and other treasures borne by a procession of slaves. Few extant art evidences reveal such a vivid merchandising expedition as the Punt Colonnade of this trader-queen of the great Eighteenth Dynasty.

The Queen of Sheba (Saba), legendary or otherwise, was evidently a south Arabian merchant of no small means, if we judge from the royal gifts she brought to Solomon (I Kings 10). Women were frequently influential in Sabacan public life.

In New Testament times we meet the merchant Lydia of Thyatira. At the riverside market place outside the gate of Philippi, where she was accustomed to display her choice woven fabrics dyed with Tyrian purple, she heard one Sabbath the preacher Paul, lately come from Asia; she entertained him and his company in her prosperous home and became Europe's first convert to Christ (Acts 16:13-15).

SHOPS

We must think of shops, whether in Old or New Testament times, as being diminutive. Even in the first century A.D. a rich provincial town such as Italian Herculaneum had prominent corner shops large enough for only a shopkeeper. His wares were about him, and customers stood on the sidewalk offering him good Roman coins (illus. 82). Similarly, tiny cavelike, windowless shops persist in thronging Damascus today along the Street Called Straight (illus. 199), where Ananias sought the home of Judas, as God

had instructed him to do (Acts 9:11). There merchants sit along their bolts of cloth coveted for flowing robes, their gleaming copper pitchers and bowls, their strips of hand-woven camel harness, their hand-wrought silver, and their pearl-inlaid tables. Such wares were sold in the Street Called Straight in the ninth century before Christ. At that time Benhadad, King of Syria, gave to King Ahab of Israel privileges to set up shops in the bazaar streets of Damascus, even as Benhadad's father had set up shops in the streets of Israel's capital at Samaria on its pivotal hilltop (I Kings 20:34).

The indifferent shopkeeper still sits on the floor among his wares or on a stool outside his candy stall.

Jerusalem was never an outstanding merchant center, in spite of her ministering to multitudes who came up to worship at the Temple. Her shops in the time of David were never larger than today. Probably they were most prosperous in the era of the eleventh- and twelfth-century Crusades, when warrior-saints turned traders and shipped to western Europe the silks, metal wares, and spices which ushered in a softer civilization than the Dark Ages knew. Jerusalem has chiefly met the simple needs of pilgrims, whose songs of ascent were made in a worship mood. These were not anxious about what they should eat or drink or how they should be clothed, for they were seeking Christ and "his righteousness."

A chief location for food purveyors in Old Testament times was outside the city walls near the Temple Area. This is attested by the last chapter of Nehemiah. The prophet resented the desecration of the Sabbath by peddlers who had carried fish from Tyre more than fifty miles away, and by those who sold victuals and all manner of wares. The animal markets of Jerusalem were outside the Sheep Gate, as they are outside the Damascus Gate today.

BAZAARS OR SÜKS

Every eastern Mediterranean city has its bazaar section. The stalls of Jerusalem-within-the-walls today give us a fair idea of what the bazaars were like in Bible

times (illus. 86). Zoned according to their wares, the silk merchants' sections display their colorful hand-loomed fabrics; the workers in gold and silver have their own gleaming süks; and David Street's vegetable booths are odorous from afar, despite improved sanitation under the British. Fly-flecked meats, fresh produce from Bethlehem terraces, and fruits from Hebron cram the dark windowless caves of ancient masonry. These are sold to clamoring buyers jostling small donkeys, hidden by their loads.

Some cities have pleasantly latticed bazaars where vines shade the customers and put them into a better mood to buy. The Street Called Straight in Damascus is arched by a corrugated metal roofing pierced with bullet holes—a poor successor to the once-columned Roman street known to Paul.

Bazaars of Egypt are constantly replenished with perfumes, jewelry, hand-woven carpets, and luxury gadgets associated with Egypt ever since the time when the Children of Israel departed, laden with jewelry which each one asked of his Egyptian neighbor.

STOREHOUSES

The small size of the shuttered shops was compensated by the large warehouses, or caravansaries, where companies of traveling traders not only rested their animals but unloaded their sealed bales of goods. Caravansaries, or khans, had within their snug walls inns or quarters for merchants, such as crowded Bethlehem inn on the night of Christ's nativity. Today one may visit in Damascus the Khan of Suleiman Pasha, among whose shadowy arches are seen goods from many quarters of the world—from moldy groceries to fine spices and perfumes, old Persian rugs, odorous leather goods, saddlebags for camels, and, from Damascus' own looms silks waiting shipment.

The warehouses of Phoenician Sidon and Tyre, when they were merchants to all the Middle East, must have been more congested than the quai of modern Haifa and Joppa in wartime.

The writers of the Old Testament make vivid reference to the Egyptian store cities

which the Hebrews were compelled to construct during their bondage. They "built for Pharaoh store-cities, Pithom and Raamses" (Ex. 1:11). For further details, see Cities, Towns, Villages, page 163.

There is a clay model of a privately owned Egyptian granary in the University Museum, Philadelphia. It has many features in common with all mud houses of the ancient East. The granary and its open court are surrounded by a wall with one gate, at the front. An outer staircase leads to a second story, or terrace, which is roof to the floor. Men on the terrace are emptying sacks of grain through holes into the bins below. A scribe sits at the front of the terrace writing accounts on a wooden board.

Hebrew traders were familiar with warehouses. "Bring ye the whole tithe into the storehouse" (Mal. 3:10) brought them pictures of low stone or mud shelters crammed with harvests they had wrested from the fields. The author of Chronicles notes, "Hezekiah had exceeding much riches and honor . . . store-houses also for the increase of grain and new wine and oil" (II Chron. 32:27-8).

Jesus referred to store-chambers (Luke 12:24). In the Parable of the True Treasure, he spoke of the man whose chief anxiety was the erection of larger and larger barns to store his crops: "I will pull down my barns, and build greater; and there will I bestow all my grain and my goods" (Luke 12:18). This is in contrast to the carefree ravens "which have no store-chambers nor barn; and God feedeth them" (Luke 12:24).

Solomon, in the prosperous period of the Hebrew monarchy two hundred years or more after the dark days of his people's Egyptian bondage when they were building for a foreign taskmaster, constructed enormous warehouses to store his fabulous wealth. "Tamar in the wilderness," referred to in I Kings 9:18 in connection with his centers of accumulated merchandise, may be Tadmor, later the romantic caravan city of Palmyra. In Solomon's store cities he housed his horses, chariots, and that which he desired to build for his pleasure in Jerusalem and in Lebanon. Does this last word imply that he had a cool summer palace in the high Lebanons,

as wealthy Egyptian and Syrian merchants do today?

No finer example of ancient warehouses may be seen today than at Italian Ostia, the port of imperial Rome. Here are huge grain storage quarters, *horrea*, used in the first century of the Christian era when Emperor Claudius was bringing in bread-stuffs for his hungry subjects.

A recently excavated area at Ostia, about 9,000 square meters facing the Streets of the Granaries and the Mills and communicating with the Tiber, helps us picture immense depositories built about A.D. 50. Their sixty-four ventilated rooms built of brick and travertine were supplemented by a neighboring series of chambers. The latter were used for storing costlier goods than the grain destined for civilian "bread and circuses."

The most famous warehouse of Ostia which archaeology has investigated is the *Horrea Epagathiana et Epaphroditiana* owned evidently by two freedmen from the Orient. Having grown rich from trade, they erected for their imported animal skins, stuffs, wool, and furniture a palatial warehouse. Its black and white mosaic floor, with a swastika medallion at its center, was looked down on by the family gods in their niche. The ample storerooms were independent of several shops on the street. There were also upper floors of rooms, separate from the warehouse, with pleasant windows and balconies.

From such storage bins as these, Ostia financed Rome and proved herself worthy of being called the "Seventh Region of the City." The image of her ships was on the first Roman coins. For she brought corn and oil from North Africa; silk, glass, and carpets from Alexandria; spices and perfumes from Arabia; wood from Spain; pearls from the Red Sea; fish from the Black Sea; medicinal herbs from Sicily.

When Paul came to Italy, the vast engineering improvements of Claudius were still new at Ostia. His persecutor, Nero, completed the work in A.D. 54. Mussolini, who had his ablest archaeologists excavate and restore this fascinating first-century merchant port, had hoped to display it as a prize feature of the Italian "1942 World's Fair at Ostia," which never materialized because of the outbreak of World War II.

SMALL-TOWN MARKETS

Every little Palestinian town tended to be a market center. Produce was not plentiful; there was a constant demand. Lack of storage facilities for perishable foods was universal, as it is in most towns of the Mediterranean today. Buying was therefore a matter of securing "daily" bread and other necessities. Fellahin (farmers) brought in their small crops for the townsfolk (illus. 176) and carried back needed commodities. Hence, the market place was the center of life in every community. There people congregated. In modern times, when enemies plan bombings, they choose the market as their target. Bombing of the melon market of Haifa is an example.

Homs, in western Syria at the juncture of caravan tracks west and east, north and south, markets the produce of a fertile plain to desert families dependent on its dusty bazaars. Aleppo, considered by Colonel Lawrence to have "the best market of the East," has goats grazing on its bazaar roof.

The market place par excellence of village Palestine is still little Bethlehem, whose name, "House of Bread," implies its plentiful food supply, brought from well-cultivated terraces and fields surrounding the white "City of David" on its Judacan limestone ridge. In the new market with well-built stalls provided by the British at the head of dramatic steps leading from Manger Square, stately wives of Bethlehem bargain for plentiful vegetables and huge clusters of green grapes from Hebron (illus. 225). Their husbands make agreeable prices for sheep, goats, camels, and sacks of sweet-smelling grain at the adjoining animal market.

Large-scale open air markets for animals are best seen at Amman in the Transjordan or along the North African littoral at Tripoli. Here camel traders come in from deserts which heard early Christian preachers.

AGORA AND FORUM

The *Athenian market place, or Agora*, was brought to light by the American School of Classical Studies at Athens, di-

rected by Edward Capps and then by Leslie Shear for ten years between 1930 and the outbreak of World War II in 1939. Below Market Hill, also known as the Areopagus because the council met there, and later, in Paul's time as Mars Hill, there developed the most famous market place of the Hellenic world in its golden age, the fifth century B.C. (illus. 35).

This area was cleared of hundreds of modern Greek homes with the aid of the Greek government. Scholars found evidence of Attic civilization extending over 3,000 years. Below the Theseum were the stoas, or colonnades of shops, where were sold vases, oils, and wines. These products gave Greece a leading part in Mediterranean life of the fifth century B.C. and made her a colonizer of fair cities as far west as Italy and as far north as the shores of the Euxine or Black Sea. One of these porches was known as "The Painted Porch," because the wall behind its columns was decorated by Polygnotus with scenes of the victory of the Athenians at Marathon in 490 B.C. In the shadow of these shops Greeks and "barbarians" from non-Greek lands chatted and discussed current world events. Luke, who in the first century after Christ perhaps walked and talked with Greeks here and in the adjacent Roman market place, remarked, "Now all the Athenians and the strangers sojourning there spent their time in nothing else, but either to tell or to hear some new thing." Paul, when he arrived at Athens, spoke "with the Jews and the devout persons, and in the market place every day with those that met him" (Acts 17:17).

The Roman market place of Athens is distinguished by the first-century Horologium, or Clepsydra. This water clock is unique in its meteorological functionings and is decorated by famous panels portraying traits of the destiny-bearing trade winds. Thousands of coins used in ancient business transactions were found in the Athenian Agora and classified by the American School, who in 1939 were just putting the finishing touches on their superb excavations.

Hadrian's Market Place at Athens is still indicated by the noble Arch in the modern city at the base of the Acropolis.

Market places of several prominent com-

mercial cities of Bible times developed into civic centers where ideas, as well as commodities, were exchanged. These Roman forums and Greek agorae were characteristic of the Graeco-Roman culture Paul knew. He walked in them daily when he was at Athens, Corinth, or Rome. Into the market place of Philippi he and Silas were dragged for trial before magistrates, because they had interfered with the employer of a slave-girl "who brought her masters much gain by soothsaying" (Acts 16:16). And into the congested market place of Corinth, Paul was hailed before the judgment seat of the proconsul Gallio, because he persuaded "men to worship God contrary to the law" (Acts 18:12, 13). A typical setup of a trade center was to have the basilica or law court adjacent to the forum. In Pompeii today we can see the forum near temples to the chief gods—Apollo, Jupiter, Venus, etc.

The agora of Corinth, controlling enormous volumes of commerce from the twin harbors and transshipping it in many directions, has seen more than thirty seasons of scientific excavation by American and Greek scholars (illus. 35). From our book, *Cruising the Mediterranean*, we quote:

Corinth was a city of shops, springs, and temples. Base your walk about these three features. Picture Lechaum Road lined with stores full of foods and wares sought by Mediterranean people, shielded from the sun by a covered 'Stoa' or arcade, as at Jerash and Athens. The right-hand colonnade housed 16 small shops of which little remains. As with most oriental shops, they were lighted only by the front door. Behind these soared the Basilica, 210 feet long and 75 wide, in one of whose rooms met the tribunal before which Paul was hailed by Corinthian Jews complaining of his teaching Christ. There sat Gallio, Proconsul of Achaia, before whose judgment seat Paul was hailed. But Gallio said, '... I will be no judge in these matters.' And Paul shortly went on his way to Ephesus.

Under the Basilica, shops earlier than those Paul saw have been found—Greek stores from the fifth century before Christ, each having tiny display windows by the doors. And around the Agora or Forum ran the famous long row of 'The Northwest Stoa' and the 'South Stoa,' largest in all Greece, running 500 feet along the entire south end of the market place, handsomely colonnaded

on its north side with 71 Doric columns and an inner row of 34 Ionic ones. Sometimes there was an upper story. Each shop had a storeroom behind it and each its own well, nicely curbed and often decorated. The floors of the shops were of mosaics, and the gutters of marble. Mediterranean shopping in ancient Corinth was an elegant pursuit.

At Rome the famous market place, or Forum, built on low ground between the Palatine and the Capitoline hills, became the very heart of the state, the cradle of free thought (illus. 81). Julius Caesar, drawing lavishly on his booty captured in the Gaul campaigns, dignified with marble trim and concrete roofs the tufa shops which had formerly been mere hovels in the wall near the basilica or public judgment hall along the Sacred Way. He added arcades to his shops and made buying comfortable.

In time the Forum Romanum begun by Julius Caesar in 54 B.C. became less and less a place of merchandising goods and more and more a rendezvous where political ideas were marketed to politicians and the *populus Romanus*. From the rostrum and the steps of the many temples which really cluttered the architectural beauty of Caesar's Forum, as well as the forums of Augustus, Vespasian, and Trajan, "idols of the market place" were dispensed and prejudices aired. Outside the gates of Rome were more suitable spaces for the sale of vegetables and animals.

Every emperor vied with his predecessor to make his Forum more elaborate—a vast monumental square dedicated to Roman victories of his era and to deities of the state. Teeming throngs of the capital milled about the lighted altars of the forums. Paul joined them and philosophized on their worship and lack of it. When he became incarcerated in the Mamertine Prison adjoining the Forum Romanum, he was almost within ear shot of the public debates.

Ostia, port of Rome referred to above, not only has a forum dominated by a stepped temple, the Capitolium, but boasts a unique chamber of commerce known as the "Square of the Corporations." We see today the remains of this once-teeming business center of the great Roman world (illus. 83). Sixty-three small offices run

around three sides of a garden court, at whose center is a small temple dedicated possibly to Ceres, goddess of grains. Forming the fourth side of the open court is a charming theatre (illus. 220) where traders cooled off after business hours. Exquisitely wrought black and white floor mosaics, still extant in many of the offices, tell the locality with which their Levantine tenants did business. One denotes by its elephant that its owner traded with Sabrata in North Africa. Another shows a lighthouse; another, a fish; another, corn measures; and still another, fish beside an altar. Some show ships bound for Bizerta, Hippo, Carthage, or Alexandria. No more dramatic portrayal of Mediterranean commerce in art has come to us than these mosaic floors in the trade center of ancient Ostia.

These trans-Mediterranean traffic signs bring us close to Paul, first colporteur of the Christian good news. He took two Alexandrian grain ships to reach Puteoli, whence he trudged to the Market of Appius and the Three Taverns (Acts 28:15). This reference to Three Taverns suggests the prominent location, in first-century towns, of wine shops. At Pompeii deep chariot ruts are seen at the tavern whose walls still stand at a corner on the Street of Consolation, as it goes down to the Street of the Sepulchres. Evidently the mourners assuaged their grief halting at this point (illus. 204).

FAMOUS BUSINESS TRANSACTIONS IN BIBLE LANDS

CONTRACT OF SOLOMON AND HIRAM OF LEBANON

One of the most famous business contracts of the Bible was that arranged between Solomon and King Hiram of Tyre. Hiram possessed vast resources of timber from forests on the slopes of the lofty Lebanon Mountains. He agreed to send Solomon all the cedar and fir he wanted for the construction of the Temple at Jerusalem. In return for this Hiram was to get 20,000 cor of wheat every year for his vast royal household, and 20 cor of pure high-grade oil beaten from choice olives grown on the rocky soil of Palestine. Cedars went into the ceilings, the sup-

porting beams, and the doors. The inner walls also were of incorruptible, long-lived cedar, and the altar was covered with cedar. Hiram's well-organized gangs of stonemasons, men of Gebal (Byblos), skillfully hewed large blocks of stone—"wrought stone," costly stone—for the foundations of the Temple. That business contract between the two kings provided, also, for close collaboration between their workmen, for "Solomon's builders and Hiram's builders and the Gebalites did fashion them the stones and prepared the timbers and the stones to build the house" (I Kings 5:18).

That contract lasted for twenty years. Besides the stone and the timber, Hiram provided gold from his Phoenician traders' store to the King of Israel, "according to all his desire." One account indicated that Hiram gave Solomon "sixscore talents of gold," an enormous sum. In return, Hiram received rather a meager payment: "King Solomon gave Hiram twenty cities in the land of Galilee. And Hiram came out from Tyre to see the cities which Solomon had given him; and they pleased him not. And he said, What cities are these which thou hast given me, my brother? And he called them the land of Gebal unto this day."

ALLIANCE OF SOLOMON AND HIRAM AT EZION-GEBER

Solomon's famous trade contracts with Hiram in the tenth century B.C. leaped beyond the borders of mountainous Lebanon and the coastal cities of Byblos, Tyre, and Sidon. The merchant king became also a copper magnate. Much of his mining and southern shipping activities have been verified and made very real to us by recent explorations in Transjordan by Nelson Glueck, of the American Schools of Oriental Research in Jerusalem. In his valuable book, *The Other Side of the Jordan*, he tells of finding Solomon's great smelting and refining center of Ezion-geber at the head of the Gulf of 'Aqabah. He also came upon a long string of smelting centers down the great desert rift of the Wadi 'Arabah, between the southern end of the Dead Sea and the Gulf of 'Aqabah, dividing Palestine from Transjordan. Glueck's two chapters, "King Solo-

mon's Copper Mines" and "Ezion-geber, Solomon's Seaport," offer fascinating information, very appealing to our own scientific commercial century.

Solomon definitely planned Ezion-geber (illus. 34) near the necessary wells and oasis palms, at a shore point where a draft blew up the wadi to aid the smelters of "Palestine's Pittsburgh." With the mining enterprises of the royal merchant we shall deal in a later section (p. 350).

The metal was refined and sent by water to southern Arabia, Egypt, and Sinai. Ships brought back coveted spices, perfumes, gums, Egyptian gems, and Sinai turquoise for the mighty developer-king. Pottery and wines were brought overland from Greece by way of Gaza and Qurnub, down the Wadi 'Arabah to Ezion-geber (later called Eloth) and on up to Petra, to be scattered along northern trade routes.

But Solomon's subjects were not marine-minded. Solomon built ships at Ezion-geber "which is beside Eloth, on the shore of the Red Sea, in the land of Edom. And Hiram sent in the navy his servants, shipmen that had knowledge of the sea, with the servants of Solomon. And they came to Ophir, and fetched from thence gold, four hundred and twenty talents, and brought it to Solomon" (I Kings 9:26-28).

In this very accurate description we have record of collaboration in a merchant marine between sea-skilled men of Phoenicia and the amazing exploiter of natural resources.

The allied navy sailed as far as "Ophir" (possibly southern Arabia) and perhaps India, Sumatra, East Africa, or Spain. On the return trip the fleet brought back each time a cargo of "gold, and silver, ivory, and apes, and peacocks." Huge cargoes were required to make the king's shields and bucklers of gold; to overlay his thrones with stretches of ivory; and to adorn the table with a service of solid gold. The precious metal was used nonchalantly in the palace lined with "the forest of Lebanon," for "it was nothing accounted of in the days of Solomon." There is little wonder that when the gift-bearing Queen of Sheba saw the luxuriousness of the Hebrew court, "there was no more spirit in her" (I Kings 10:5). Silver was as

plentiful as stones, and imported Lebanon cedars as common as lowly sycamores of Judaea.

In the merchant king, Solomon, we have one of those instances which recur all through thousands of years of history—a great warrior-conqueror, like David, followed by a trade-expanding, consolidating king, sponsor of tremendous public works, and a peace-lover. Such was the case when Tuthmoses III was followed by the peace-loving Egyptian King Akhenaton. "The heyday of Ezion-geber was during the time of Solomon in the tenth century B.C." (Glueck, p. 113).

Glueck cites amazing evidence of the shipping activities at Solomon's seaport. Large copper and iron nails were excavated by his expedition from the third and fourth layers of towns on this site, pointing to the fact that each succeeding settlement here went in for boat-building. Pitch for caulking has also come to light, and fragments of thick ropes used only in boats. Some of the ropes were made from twisted palm branches, and the larger ones from hundreds of fibers taken from palm bark. The timber for the boats, in the time of Solomon and Hiram and later, was supplied by the forests of Edom, which likewise furnished charcoal for copper refineries.

Thus we have remarkable correlation between archaeology and the Bible narrative of commercial co-operation between the two famous merchant kings of the tenth century B.C., Solomon and Hiram.

TYPES OF MERCHANDISE

Several famous Bible passages reveal the exports and imports of Palestine and her neighbors. Ezekiel 27 gives an elaborate trade inventory for the port of Tyre (illus. 94). It looks somewhat like this:

Imports to Tyre	from
Boxwood benches, ivory inlaid	Kittim (Cyprus probably)
Oak for oars	Bashan
Cedar for masts	Lebanon
Linen for sails	Egypt
Blue and purple fabric for awnings	Isles of Elishah
Silver, iron, tin, lead	Tarshish

Men and brass	Javan, Tubal, Meshech (Greece?) Syria
Emeralds, purple brodered work, linen, coral	
Horns of ivory and ebony for inlay work	Many isles
Wheat, pannag (perhaps candy), honey, oil, balm	Judaea
Wine of Helbon and white wool	Damascus
Precious riding cloths	Dedan (in northwest Arabia)
Lambs, rams, goats	Arabia
Spices, gold, precious stones	Sheba and Raamah (in Arabia)

How did Tyre amass sufficient wares to exchange for such heavy imports? Certainly, the "bright iron, cassia and calamus" listed were not her only exports. As a trans-shipper, she welcomed home the traffickers sent out in every direction. Trade balances affected nations of antiquity as they do today. When Rome in the first part of our era imported more luxury goods than she had exports to equalize, her currency became dangerously depressed.

Another Bible passage revealing types of commodities from definite localities is I Kings 10:10: "a hundred and twenty talents of gold, and of spices very great store, and precious stones," together with fine spices from Sheba in western Arabia.

Traders in the busy Egyptian Delta would have the following articles in their commercial dockets:

Exports

Grain (Gen. 12:10; Gen. 41:43)
 Linen (byssos) famous through western Asia
 Papyrus (for paper)
 Jewelry, amulets, and cult objects
 Porcelain bowls
 Glass jars
 Carved ivory
 Horses and chariots

Imports

Gold (from the Sudan and Punt)
 Copper from Cyprus
 Cedar from Lebanon (for mummy cases, boats, and temples)
 Lapis lazuli from Babylonia (for jewelry)
 Jewels from India via Red Sea and Nile
 Turquoise from Sinai Peninsula

Myrrh, spices (for embalming); skins, cattle, ostrich from Sudan (for fans, pillows, mats)

The Tell-el-Amarna Letters are full of types of merchandise sent as gifts or tribute from rulers of Bible lands to Egypt.

TECHNIQUE OF PURCHASING REAL ESTATE

An interesting Old Testament record of a purchase of land is recorded in Jer. 32:6-15. By right of inheritance the prophet Jeremiah, even though a captive of King Hezekiah at the time when Nebuchadnezzar was besieging Jerusalem, optimistically arranged to buy a portion of his uncle's property, a field in Anathoth. He weighed seventeen shekels of silver, signed the deed with his personal seal, called witnesses, and had them confirm the weight of the silver on the scales. He gave the deed to Baruch in the presence of other witnesses in the court of the guardhouse where he was prisoner and saw that it was put in an earthen vessel. The story does not continue, but we may suppose that a cloth was placed over the neck of the jar, clay smeared over the string, and a cylinder-seal rubbed over the wet clay to give it official mark.

One of the familiar Bible customs in business matters was that of taking off a shoe in evidence of an agreement (Ruth 4:7). The removal of a shoe in protest against an obligation not met is seen in Deut. 25:7-10.

BUSINESS CORRESPONDENCE

THE LETTER-WRITER

At the gates of ancient cities, such as Ur, Babylon, Jerusalem, Memphis, and Damascus, professional letter-writers, or scribes, sat looking for business. Along the main streets where traders congregated letter-writers took dictation from merchants bringing witnesses to seal the contracts. A low table and stools made up the "portable" office equipment for ancient business deals (illus. 73).

Scribes on ancient temple staffs often included women secretaries.

THE DESK OF THE SCRIBE

Specimens of the desk of the scribe can be seen in the Cairo Museum. It often consisted of a portable palette with little recesses for holding the pens. The pen was made from the reed *juncus maritimus*, cut slanting and sometimes frayed out in brushlike form (illus. 186). The palette had small depressions for holding one cake of red and one of black pigment for ink. The red was made from red ochre; the black, from vegetable soot mixed with gum arabic and water. Papyrus rolls found at Herculaneum were written in ink made as ours is today, from sulphate of iron, nutgalls, and gum. Stone grinders were used to pulverize the ink material, which was moistened with water at the time of writing. Sometimes Egyptian ink was carried in a little bag tied to the palette. Its quality was excellent, surviving thirty centuries on both potsherd ostraca and papyrus.

Royal letter-writers carried ornamented writing-cases, often handsomely inlaid.

The inkhorn used in Palestine is referred to by the prophet Ezekiel (2:2, 3): "one man in the midst of them clothed in linen, with a writer's horn by his side." Such inkhorns, usually of metal, are still used in remote sections by modern Palestinians, who tuck them into their girdles.

Usually, a crowd of witnesses looked on when loans were arranged, to attest fair rates of interest and confirm them if the lender falsified.

CLAY TABLETS

Nothing serves as finer illustration of the manner in which the culture of the ancient Tigris-Euphrates Valley flowed into Syria, Palestine, and Egypt in Bible times than the clay business tablets and cylinder-seals, of which we shall speak below. Recently, at Megiddo, overlooking the Plain of Esdraelon, cylinder impressions have been found on pottery of the early third millennium B.C., and Early Bronze Age "combed" ware has come to light at Byblos on the Phoenician coast. This discovery proves that intellectual and business interchange took place at almost the dawn of history between the eastern Mediterranean

seaboard and early Sumer, from whose city, Ur of the Chaldees, Abraham came (Gen. 11:31).

Five thousand years ago the merchants of Sumer, whose merger with Semitic Accad produced Babylonian culture, had their accountants make entries on tablets of clean-washed, kneaded, smooth clay from the great river beds. These small oblong or conical tablets, kiln-fired or sun-dried, received while still wet the imprints of the stylus, a triangular pen of hard wood, bamboo, bone, ivory, or metal. When the stylus, which had been squared or beveled at one end and shaped to a handle at the other, finished making its neat lines of imprints, the tablet looked as if a tiny-footed bird had been hopping across it. Assyrians called their stylus *qanu*, from the word meaning "reed." Reeds made ideal styli because their hard pith did not easily absorb water.

Tablets were frequently inscribed on both sides.

CUNEIFORM WRITING

The stylus made wedge-shaped cuneiform letters (now called "cuneiform" from the Latin *cuneus*, meaning "wedge") to carry the business communication. Prior to 3000 B.C., the Sumerians had used pictographic script, with hundreds of tiny pictures to indicate words. This was the oldest written language. It gave way to an abbreviated set of symbols or letters, the Sumerian cuneiform. As late as the seventh century B.C., the Persians revived the ancient Sumerian cuneiform on their important inscriptions as a fad. In doing so they gave themselves a difficult task, for the original 500 or more cuneiform signs denoting syllables had been reduced; and by 530-520 B.C. they were boiled down to as few as thirty-nine.

The cuneiform alphabet transmitted business messages in Babylonian, Assyrian, Hittite, Hurrian, Hebrew, Phoenician, Egyptian, Anatolian, Aramaic, and Indo-Iranian languages. In the spring of 1933 Elihu Grant discovered at Beth-shean a rare cuneiform record in a Canaanite-Semitic dialect—possibly a receipt for goods delivered in the fourteenth century B.C.

Here again in the wide prevalence of cuneiform we see evidence of the constant infiltration of influences between the two great river valleys of the ancient East. The Nile and the Tigris-Euphrates were really two equally important rockers on the cradle of civilization. Egyptians wrote on clay tablets and on their own papyrus in hieroglyphics. In cuneiform script were written the well-known official documents, the Tell-el-Amarna Letters (c.1400-1350 B.C.), some 300 clay tablets carrying the business correspondence of the Egyptian kings, Amenhotep III and Amenhotep IV. According to Sir Flinders Petrie, the first Egyptian markings of ownership were made in prehistoric times in the form of lines scratched on pottery. This was long before the first Egyptian hieroglyphic pictograms appeared, perhaps on ivory.

Parallel lines of cuneiform, often in columns, in neat wedges, were an attractive form of writing, but difficult to decipher. Many of the choice little tablets owned by museums such as the Metropolitan Museum of Art and the University Museum at Philadelphia are only now in process of translation. Scholars need a grammar of the Accad language and of the various dialects in which cuneiform documents have been written. Use of cuneiform in everyday business was discontinued two or three centuries before Christ. The easier Aramaic was substituted among many eastern merchants. Jesus used the Aramaic for his daily contacts with people.

BUSINESS DOCUMENTS

Business documents on Babylonian clay tablets, which are almost imperishable, have survived in vast numbers, many of them from 3000 B.C. at Nippur in the heart of ancient Sumer, on the early course of the Euphrates. Nippur has served the world well, because its merchant priests recorded on clay every minute business transaction, thus preserving the details of everyday life. Tablets bear receipts, for example, indicating that interest at the rate of 20 per cent, has been paid for six months on a loan of four shekels of silver. Such a clay receipt is in the University Museum at Philadelphia.

Clay cones resembling modern ice-cream

cones, carried cuneiform records into roaring kilns, or were baked in hot Mesopotamian sun. A clay cone from Ur appears in illustration 76. Important documents, after being inscribed with the stylus, were often placed in a clay envelope which bore the seal of the sender, the name of the addressee, and often a repetition of the message. To open the communication, the clay envelope had to be cracked. Illustration 75 shows a tablet with envelope, from Nippur, dated in the reign of Samsu-iluna, c.1900 B.C., shortly before the time of Abraham.

The small clay tablet at left of group of two in illustration 78 is from archives of the temple of E-barra in Sippar, written in neo-Babylonian cuneiform in the 7th year of the reign of Nabunaid (549 B.C.), eleven years before the conquest of Babylon by Medes and Persians under Cyrus.

The accompanying tablet was written in the twenty-fifth year of Darius, King of Babylon (497 B.C.), during the Jewish Captivity. It is an official letter from a priest of the sun-god, telling the supervisor of supplies for the temple that the allotted barley has been dispensed to the temple treasury workers through their foreman—an interesting commentary on meticulous labor policies.

The tidy little clay tablet in illustration 79 carries a list of payments on leases held by tenant farmers on land belonging to the sun-god, Shamash. The rent was ordinarily paid in farm produce. This tablet, now in the Metropolitan Museum of Art, was written in neo-Babylonian cuneiform at Sippar in the fourth year of Cyrus, King of Babylon (527 B.C.). Cyrus is mentioned in II Chron. 36:22 in connection with the rebuilding of the Jerusalem Temple.

The contents of early Babylonian communications are a monotonous business jargon, suggests Elihu Grant (illus. 74-77). They deal with sixty-year leases whose terms have been met in advance; they record deeds, mortgages, sale of slaves, purchase of silver mines, bankruptcy proceedings, wills, promissory notes, and purchase of fields for the cultivation of sesame for oil. One of these contracts published by Grant tells of three men buying an unoccupied house alongside *zebenaqarrad*—whatever this picturesque name implies—and

says that they paid "for its full price, ten gin of silver," enough so that the former owner would not complain at later date. At Ras Shamra, Syria, opposite the island of Cyprus, in the library of an ancient theological seminary, tablets have been found registering the ships which used this port.

HISTORIC CLAY RECORDS

One of the most famous cuneiform documents is the Code of Hammurabi, sixth king of the west Semitic dynasty of Babylon (c.1728 B.C.). Various inscriptions of the detailed laws by which this Amorite merchant king encouraged, protected, and guided businessmen were erected. We know best the one found in Susa, the Persian city of Shushan which figures in the story of Queen Esther (Esther 1:2). The record was inscribed on a stele, or upright slab, at whose top was carved the bearded, Persian-capped king receiving from the sun-god Shamash the code for his subjects. Students find interesting contact between this scene and the later codification by Moses of the Decalogue on Mount Sinai (Ex. 20:1-17). In belts of finely chiseled cuneiform running around the stele are about 282 laws regulating business or elaborate commercial transactions of almost 4,000 years ago. Hammurabi was probably contemporary with Abraham.

The cuneiform records of business between Amenhotep III and Amenhotep IV, referred to above, give vivid insight into the enterprises in which these Egyptian rulers and their neighboring vassal kings engaged. About 300 of these clay letters were found in 1887 and 1891 by Egyptian workmen who accidentally chanced upon a crumbling chest in Akhenaton's royal office building at Amarna, 180 miles south of Cairo. The clay letters proved to be correspondence between vassal rulers and Amenhotep III and Amenhotep IV, the latter the spiritual monotheistic young king Akhenaton who reigned from 1387 to 1366 B.C. They discuss the exchange of copper, wool, oil, manufactured novelties of the Eighteenth Dynasty and deal with sundry other historic matters dispatched from Uru-salim (later Jerusalem?) and

other cities of the Middle East. These letters, lost for 3,000 years, constitute the "oldest pouch of international correspondence."

Thus we see that cuneiform's wedge-shaped letters were the A B C, of ancient business transactions, even as the French language more than thirty centuries later prevailed as an international vehicle of diplomats.

Among the first clay tablets published in modern times were those translated by Albert Clay, dating from the reign of Esarhaddon, son of Sennacherib, (681-668 B.C.). Their subject matter included personal contracts, temple archives revealing payments by individual constituents, and names of a large number of foreigners, Amorites and Arameans, serving in the temple. These old "church treasurers' books" put us in close touch with the benevolent giving of long ago, in terms of barley, oil, cattle, wool, and "old dates for grinding."

Probably the earliest clay tablets which can be completely read at present date from about 3000 B.C. These were found at Nippur and at Ur, on the Euphrates.

Tracing new horizons in history, William F. Albright tells of 1,000 clay tablets found in the traditional home country of "the Babylonian Noah," at Tell Farah; and of several thousand tablets from Sumerian Lagash (c.2400 B.C.). The latter tablets are concerned with items of temple administration.

Since 1935 more than 20,000 Babylonian clay tablets have been found at Mari, which controlled the Euphrates for 300 miles. In the royal palace, covering more than fifteen acres, 5,000 tablets proved to be letters from princes and officials to the merchant king. They reveal how laboriously faithful Babylonians were to their business enterprises. One tablet carries the names of nearly 1,000 trade-guild members.

Thus the clays cry out, even as the stones of old Jerusalem cry out their ancient story. The tablets reveal an amazing energy among merchants of 5,000 years ago, a Semitic interest in trade which still persists, and a scrupulous concern for careful bookkeeping. Sumerians, like ancient Egyptians, says Théophile J. Meek of the University of Toronto were "doing cube

roots" before 2000 B.C. Before 3000 B.C. they had found the correct formula for calculating the area of a rectangle and were well on their way to the intricacies of "3.1416."

According to Meek, ancient Cappadocians, whose plentiful silver attracted a colony of old Accadians about 2000 B.C., are given credit for developing the first letters of credit, drafts, and checks.

One of the world's famous collections of Babylonian and Assyrian cuneiform business chronicles and history-laden bas-reliefs of curly-bearded kings is the property of the British Museum. Here are many of the Amarna Letters, written in several types of cuneiform and on clay native to various western Asiatic lands from which they were dispatched to the Egyptian kings. This collection also includes some of the barrel-shaped clay cylinders current in Babylon of the sixth and fifth centuries B.C., carrying a cuneiform prayer of Nabonidus for his son Belshazzar. A hexagonal clay cylinder tells in cuneiform of six campaigns of Sennacherib, King of Assyria, including the story of his march against Hezekiah and his siege of Jerusalem. There are, too, interesting "Syllabaries" with parallel columns of Sumerian cuneiform signs, the simplified Assyrian, and the Neo Babylonian characters which displaced the more complicated archaic forms.

The Museum of the University of Pennsylvania in Philadelphia and the Oriental Institute of the University of Chicago are rich in recently recovered Mesopotamian treasures of clay business transactions.

Illustration 77 shows a barrel-shaped clay cylinder from Babylon, bearing in cuneiform a boast of Nebuchadnezzar, similar to the "I, Nebuchadnezzar" passages of Dan. 4.

We found it worth a special trip to Philadelphia to spend a day among the clay tablets in the University Museum. Development of writing, from the first pictographic imprints on clay made by that ancient non-Semitic Sumerian people who migrated into lower Babylon from a base farther east, about 6,000 years ago, to the earliest cuneiform invented by their scribes, is traceable here. It includes the famous Hilprecht collection of thousands

of tablets from Nippur. Some of these have cuneiform multiplication tablets from 1 to 19 (written c.2000 B.C.), square roots from 1 to 12 (c.2200 B.C.), and a complete Sumerian grammar, dealing with pronouns, for scholars at a temple school in 2200 B.C. The Sumerian tablets of the University Museum set forth the oldest written literature of any significance ever recovered. Scholars are only now realizing the vast influence of Sumerian compositions on the entire Middle East.

ANCIENT REPOSITORIES

Repositories for business documents on cuneiform tablets have been found in Palestine, at Gezer, near the Hall of Judgment (c.fifteenth century B.C.). At Tell el-Hesi near the Egyptian border has been found a storage house for commercial "files," and at Samaria, capital of Israel, the "Ostraca House of Ahab" has been excavated. The famous Lachish Letters on ostraca fragments were found in a little chamber near the guardroom, where they had perhaps been filed for safekeeping. The great library of Assurbanipal at Nineveh was made up of files of small clay tablets. Egyptian libraries contained papyrus rolls looking like quantities of graduates' diplomas. The famous libraries of Egyptian Alexandria contained hundreds of thousands of papyrus rolls, literary, as well as commercial, records. According to Albright, this greatest library of the ancient East and the first ever installed in a royal palace, grew because of the hobby-collecting of the last Assyrian king, Sardanapalus (668-626 B.C.). This ruler had his scribes copy thousands of "lost" clay tablets from Babylonian temples. It is odd that this king, with such a zest, should at long last have grown discouraged over international issues and have burned himself, his wives, and his treasures in the palace which had become undermined by the swish of the Tigris River.

SEALS

CYLINDER-SEALS

When the letter-writer had finished his cuneiform message, he had the sender and

the witnesses remove from around their necks their own small cylinder seals and roll them over the still-wet clay to make their signatures (illus. 80).

These personal and royal cylinder-seals, which have survived the wrecks of time as have no other artistic devices of everyday life in the Middle East, were made the subject of monumental study by Henri A. Frankfort, Research Professor of Oriental Archaeology at the Oriental Institute of the University of Chicago. He fully documented the development of seals from the prehistoric period through the dynasties of ancient Sumer and Babylon and the influential Persian period. He rounded out his research with reports on cylinders found in the nations having a "peripheral" relationship to Mesopotamia—Cappadocia, Syria, Egypt, the Aegean islands, and India. The student who feasts his eyes upon the forty-seven full-page plates of Frankfort's cylinders gains some idea of their unique evolution. They began as little more than tiny clay spools scratched by prehistoric hands with twigs in attempts to depict a god, the head of a sheep, or a flower rosette. They later developed the brocade designs of the first early dynastic period, and the borders of charming tiny stags with branching antlers of the third early dynastic period, and the epic scenes from myths and everyday life left by the seal-cutters of Sargon's age (illus. 80). Little wonder that a research thesis has been lately developed around the depiction of animals in these cylinders of the ancient East.

Of great human interest is the lapis lazuli seal of Queen Shub-ad, which was found by Leonard Woolley at Ur of the Chaldees. It was tossed into her grave after all her other treasures and her court had been buried sacrificially with her. This tiny bit of art identified the amazing finds seen today in the University Museum at Philadelphia or at Baghdad.

The material in Frankfort's *Cylinder Seals*, supplemented by *Cylinder Seals from the Diyala Region* (dealing with almost 1,000 stratified seals found during his direction of work for seven years in Iraq under the auspices of the Oriental Institute of the University of Chicago), presents treasures of revealing art. Leon

Legrain, of the University of Pennsylvania, has published two volumes equally authoritative in the field of cylinder-seals. Probably more readable are the many casual references to "seal-hunting" in the charming *Letters of T. E. Lawrence*. No Euphrates Valley heat was too intense to deter him from searching among native hovels for gem-cut seals to send back to friends in England. Cylinder-seals were incised on many hard surfaces, from baked clay to lapis lazuli, gold, silver, carnelian, blue chalcedony, rock crystal, pink marble, jasper, shell-core, ivory, and glazed pottery. Their artistic quality was remarkable when we consider that up until Assyrian times they were chiseled with inefficient copper tools. In early Egypt, cylinder-seals were of wood, soon followed by ivory. Sir Flinders Petrie claimed that writing, which came into Egypt with the First Dynasty, probably from Babylonia, has its earliest known example in the signature of one king Ka and in the seal of the early historic king, Nar-mer.

The art of engraving designs or letters on gems as in cylinder-seals is known as "glyphic art." The art influence of Babylonian cylinder-seals has been very wide. Frankfort thinks that their palmettes, winged bulls, and genie motifs have left traces in Greek and even Romanesque decoration.

The most valuable seals, of course, are those which carry cuneiform inscriptions as well as designs.

The well-known seal of Darius the Great shows the king in his two-wheeled chariot, between two date palms. His charioteer is driving over one lion; the king, with bow in hand, stands ready to shoot another lion standing on his hind legs. The winged disk is at the top center of the seal, along with the letters of the god Ahura Mazda. At the left is a trilingual cuneiform inscription saying in old Persian, Median, and Babylonian, "I am Darius the great king." Seals containing both a picture and written matter prove of exceptional interest.

Amazing sets of cuneiform inscriptions written on large tablets of gold and silver have been found in the foundations of the palace of Darius at Persepolis by the Oriental Institute of the University of Chicago.

JAR-HANDLE SEALS

The "little stone rollers" of 2500 B.C. were used not only in signing Babylonian clay documents but in making safe for shipment to distant parts jars containing valuable papers or commodities. A cloth was placed over the neck, soft clay smeared on top of the binding cord, and the cylinder rolled over the wet mud. If the seal was unbroken upon arrival, the merchandise was intact.

Bales of goods were also sealed by stamped cords. Cylinder-seals signed clay bills of lading even before the invention of an alphabet.

In the University Museum at Philadelphia there are lumps of clay which once were "stoppers" of now-lost jars. They still bear the imprint of vanished seals, marks of the cords which tied cloth over the mouth of the jars, and even the marks of the cloth itself. In this same collection we can trace the evolution of seals from the earliest buttons with geometric designs (possibly mere beads) to the predynastic Sumerian cylinder-seals in Babylonia prior to 3000 B.C., with simple animal or human forms for designs. Later, hunting scenes or groups of people appear on the seals. We marvel at the skill of primitive men working such delicate and lifelike little friezes as intaglios for use in business signatures. We have learned by experience with our own little Babylonian cylinder-seal from the age of Abraham that it requires considerable skill to roll out a legible impression on wet clay.

In Judaea records of ownership were often imprinted on clay jar handles while still wet. Private owners of large olive-oil and wine jars imprinted their personal seals on the handles. This custom did not prevail in the northern kingdom. At Megiddo on the Plain of Esdraelon a sensational find has been made in the form of a jasper royal seal impression. It shows a well-executed figure of a lion and carries a Hebrew inscription, "Belonging to Shema, servant of Jeroboam." The famous Seal of Gedaliah, rescued from debris in Lachish mound near the Persian gateway below the outer city wall, bears traces of the papyrus "weave" of its document to which the seal was affixed before it had

hardened in the sixth century B.C. This Gedaliah is probably he who was appointed governor of the cities of Judaea by Nebuchadnezzar (Jer. 40:5) when the Babylonian invader left the city. Gedaliah's headquarters were at Mizpah (Jer. 40:8) until he was treacherously slain by the Jewish "loyalist" leader, Ishmael. To Gedaliah the Judaeen prophet Jeremiah voluntarily attached himself as he remained with "the people that were left in the land" at the time of the Captivity. This tiny pinkish red-clay seal, therefore, puts the modern scholar of the Bible in close touch with the sixth-century Hebrew prophet. For light on jar-handle seals of the fifth, fourth, and third centuries B.C., see *Bulletin* No. 53, p. 21, American Schools of Oriental Research.

For the winged-scroll design stamped on a jar handle made at Hebron in the period of the Hebrew monarchy, see illustration 54.

The December, 1941, *Bulletin* of the American School of Oriental Research, page 17, carries the imprint of "The Seal of an Official of King Ahaz."

SCARABS

From the north, button seals made their way to the Mesopotamian valleys and became the forerunners of the flat seals we know as "signets" and ancestors of the multitudes of "scarab" seals. Scarabs, or beetle seals, bore cartouches or stone-cut symbols enclosed by an oval line. Reigning Egyptian rulers and court officials used these as signatures. This signet or scarab type of seal was set in rings and was the type referred to in Gen. 41-42: "And Pharaoh took off his signet ring from his hand, and put it upon Joseph's hand." Thus in Joseph was vested authority to sign contracts for state business when he rode in the second chariot with only Pharaoh ahead. For Joseph was "over all the land of Egypt." For further information on scarabs, see page 279, *Jewelry*.

One of the most famous scarabs recently excavated is the huge pectoral scarab of Amenhotep III which came to light during the Lachish excavations. It carries in eight parallel lines of hieroglyphics the record of a lion hunt in the tenth year of the

reign of Amenhotep III and Queen Ti, 1403 B.C.

OSTRACA

Ostraca were fragments of pottery so-called from the Greek word meaning "oyster shell." As peasant-made pottery was constantly getting broken, there were always plenty of ostraca at hand on which to scratch memoranda of business receipts. Ostraca were also used for ballots in political contests such as the Athenians enjoyed. When a man was voted against by too many of his opponents, he was "ostracized," or ousted. Some of the original ostraca cast against Themistocles have been excavated in the Athenian Agora by the American School of Classical Studies, under Leslie Shear. In Athens, also, the writers have seen excavated ostraca cast against Aristides the Just in 483 B.C., he who was "ostracized" simply because people were tired of hearing him called "The Just." Hipparchus, descendant of the great Peisistratus, was the first Athenian to fall victim to the practice of ostracism. To banish a citizen required several thousand votes by ostraca.

One of the largest ostraca in the world is 1 yd. long—part of the "Story of Sinuhe." This Twelfth Dynasty Egyptian classic tells how a courtier flees from Egypt to Palestine and then returns to political favor. It is in the Cairo Museum today.

PAPYRUS DOCUMENTS

If our letter-writer on his ancient street was an Egyptian, he usually wrote on papyrus or reed-paper instead of clay tablets (illus. 186). And his customers signed their messages with flat signets or scarabs. These seals proved more convenient for papyrus than the cylinder type used on Babylonian tablets.

Papyrus sheets were made from the tall Nile paper-reed, *Cyperus papyrus*. Strips from the center of the sedgy stalk were placed side by side and another sheet of shorter strips laid at right angles on top of them. The whole was hammered into a thin "paper" whose layers adhered after soaking in Nile water or stuck because of glutinous matter from the reeds. The

papyrus sheets were burnished smooth with shell or ivory and were then joined to make the desired length. The message ran "the right way of the fiber," parallel to the length of the papyrus. Tied into rolls, these became the books of ancient accountants and men of letters. They were used not only in Egypt but in Palestine, Syria, Greece, and Italy. Up until medieval times in Italy papyrus was used for Latin manuscripts.

Egyptian papyrus was shipped to ancient paper-manufacturing centers, such as Byblos.

Papyrus business documents were creamish-white when new and turned to a beautiful brown with age (illus. 89). Some very famous papyri have been rescued from huge rubbish heaps in Egypt, where they were disintegrating into fertilizer. On mummy cases, which were made of old papyrus sheets, Sir Flinders Petrie found many priceless messages.

Much of the Old Testament was written on papyrus. These records have decayed in the damp Palestinian climate and perished, as historic clay inscriptions have not. Therefore, we can expect relatively few of the "original manuscripts" to come to light. Other portions of the Old Testament were doubtless written on animal skins, or leather, the forerunner of parchment and vellum. The latter was developed at Pergamum, in the second century B.C., possibly at a time when Egypt was refusing to export her papyrus reeds.

HIEROGLYPHIC, HIERATIC, AND DEMOTIC WRITING

When ancient Egyptians wrote on papyrus they used *hieroglyphics*, or pictograms, a complicated series of little pictures. Each picture represented an idea or a sound, such as the "sacred eye of Osiris," the symbol of the hawk-god Horus, the *ankh* or key of life, the sun symbol, or the cartouches of kings. The hieroglyphs ran up and down, or if horizontally arranged were read from right to left. The word signs appeared best when carved in stone, as on the obelisk at Heliopolis. A speedier alphabet than the hieroglyphs (sacred to priests) was the cursive *hieratic*; a still speedier "shorthand" was the popular

demotic Egyptian script. Inscriptions in hieroglyphics, demotic script, and Greek were deciphered by the French scholar, Jean-François Champollion (1822), working on the famous Rosetta Stone. Thus was unlocked the secret of all Egyptian hieroglyphics.

SOME FAMOUS PAPYRUS DOCUMENTS

After its conquest by Alexander the Great in 332 B.C., Egypt turned out many beautiful papyrus business contracts in Greek. From this same period are the Archives of Zenon, a Carian Greek in the economic ministry of Ptolemy II. These papyri, in the Cairo Museum today, illustrate many aspects of Graeco-Egyptian life in Alexandria, Palestine, and Egypt.

From Elephantine, in upper Egypt, valuable papyri originating with the colony of Jews living there in the fifth century B.C. have been found. Among them is the famous Passover Letter.

Priceless are the Oxyrhynchus Papyri found in Egypt, 120 miles south of Cairo, in rubbish heaps. They appear to carry sayings of Jesus. A scroll of "The Ritual of the Dead," 23 ft. long, beautifully written and illuminated, in hieratic characters, is housed at the Brooklyn Museum.

A page from the Wilbour Papyrus, written in hieratic script, is seen in illustration 89. This dates from the reign of Ramesses V (c.1150 B.C.) and is part of the longest of all secular Egyptian manuscripts. It gives amazing facts about land tenure and lists of geographical names which have helped in locating hitherto unknown places in Egypt. It is now in the Brooklyn Museum.

WOODEN TABLETS

Letter-writers used wooden tablets before and after the invention of papyrus. They whitewashed the tablets or covered the surface with mud or wax to receive the imprints. Even down to New Testament times writing tablets continued in use. The father of John the Baptist, stricken dumb until the birth of his son, "asked for a writing tablet, and wrote, saying, His name is John" (Luke 1:63).

PARCHMENT AND VELLUM RECORDS

By New Testament times parchments, prepared from goatskin, antelope hide, or sheepskin, and vellum from fine kidskin were being used, in addition to papyrus paper. Paul's particular reference in II Tim. 4:13 suggests that valuable documents were confided to parchment rather than to perishable papyrus: "bring . . . the books, especially the parchments." This suggests that our New Testament was written on parchment and on vellum, as well as on papyrus. Were the parchments Paul desired portions of the Old Testament on leather, or new notebooks in which to inscribe letters to his Christian friends?

MONEY IN BIBLE LANDS

OLD TESTAMENT "MONEY"

King Solomon was the richest man of his day, with an income from 666 weighed talents (approximately \$20,000,000) (I Kings 10:14). He stood in an armor of beaten gold.

Yet Solomon had literally not one coin to rub against another. For he who was "wiser than all the children of the east, and all the wisdom of Egypt" ruled from 973 B.C. to 933 B.C.; and the first coins did not appear in the coffers of trade until a king of Lydia in western Asia Minor invented this convenience in the seventh century B.C. This was shortly before the time of King Croesus, of "rich as Croesus" fame.

DAWN OF COINAGE

Lydians used both electrum alloy and gold and silver standards. Even the famous treasure of the Cretan kings of Knossos contained no coined money, although Minoans in the third millennium B.C. had borrowed from Egyptians the custom of weighing silver and gold. A silver coin from Knossos bearing the famous Cretan labyrinth is seen today at the American Numismatics Society Museum in New York. But this dates from only the first century B.C.

Lydians were Anatolians who had mingled with Hittites and other invading peoples. Taking advantage of the plentiful gold and silver of their mines and stream beds, they turned out so much money that coins were plentiful by 600 B.C. in the Greek cities of the Aegean. Thoughtful Greeks and clever Egyptians asked themselves why they had not invented this instrument of trade. The Persian Cyrus, who had conquered Croesus and his capital, Sardes, by 546 B.C., carried back the coined-money idea into Persia. His successor, Darius the Great (521-485 B.C.), sent minted money throughout the vast Persian-Babylonian business world. He issued gold and allowed his satraps to coin silver. His trade empire exceeded anything yet seen. Excellent roads, plentiful currency, and astute traders were sound basis for the prosperity and material grandeur carried over into the reign of his son Xerxes.

VALUE BY WEIGHT

References to money in the Old Testament are extremely confusing. We suggest that our readers consult the American Numismatics Society in New York or public libraries for authoritative volumes. One cause of confusion is that such words as "talent" and "shekel" which later denoted minted currency were in ancient times units of weight. The word "shekel" is derived from the Hebrew *shegel* (*sháqal*), "to weigh." A Roman-Attic talent was equivalent to 6,000 denarii, or drachms. The denarius was the most convenient coin in the time of Christ, for it was the equivalent of a laborer's daily wage.

Therefore, when we read that Abram paid to Ephron the Hittite for the Cave of Machpelah "four hundred shekels of silver . . . current money with the merchant" (Gen. 23:15, 16), or that Jacob in payment for the land at Shechem where he had first pitched his tent handed over "one hundred pieces of money" (Gen. 33:19) we must not visualize their using coins. Lumps of metal were used as currency even before they were stamped with a distinguishing mark. The mark might take the form of a god, a ship, a gate, a pig, a temple, a chalice, or an emperor.

EGYPTIAN MONEY AMONG HEBREWS

In Old Testament times Palestine merchants used bars or wedges of metal stamped with their private markings, such as an ox, a gazelle, a hide or some other design of Babylonians or Egyptians. (See story of the wedge of gold stolen by Achan of the tribe of Judah in period of Joshua, Josh. 7:21.) They also used the Egyptian weight-and-scale method of reckoning values. On one side of the scale was placed the merchandise under consideration; on the other, rings or bracelets of gold, silver, iron, or copper. Recognized weights were also used on the scale. Egyptian money also took the form of wire, made of copper, iron, or gold. Small bags of gold dust were also "money."

Joseph, overseer of Egypt for Pharaoh, "gathered up all the money that was found in Egypt" from hungry Egyptians in exchange for grain. This he deposited in the "First Bank of Egypt," Pharaoh's house (Gen. 47:14). And he saw to it that into the mouth of his brothers' grain sacks as they started home to Palestine their returned "bundles of money" were tucked (Gen. 42:35). But these bundles of money were not the neat rolls of counted coins or the packages of crisp new bills we see in tellers' windows at modern banks. They were probably the weighed metal rings used by both Egyptians and Palestinians. As late as the time of Jeremiah we read, "I . . . weighed him the money in the balances" (Jer. 32:10). And in the New Testament the chief priests, in issuing the betrayal money to Judas, "weighed unto him thirty pieces of silver" (Matt. 26:15). These were actual coins. The weighing was to test their "standard."

Here are Old Testament examples of money by weight:

"his oblation was one silver platter, the weight whereof was a hundred and thirty shekels, one silver bowl of seventy shekels . . . one golden spoon of seventy shekels" (Num. 7:13, 14).

"David gave to Ornan for the place [the historic threshing-floor on which the Temple was built] six hundred shekels of gold by weight" (I Chron. 21:25).

"And they fetched up . . . out of Egypt

a chariot for six hundred shekels of silver" (II Chron. 1:17).

"And the weight of the nails [for the Temple at Jerusalem] was fifty shekels of gold (II Chron. 3:9).

"This shall they give, every one that passeth over; half a shekel after the shekel of the sanctuary (the shekel is twenty gerahs), half a shekel for an offering to Jehovah" (Ex. 30:13). For value of the gerah weight-unit, see page 145.

Even before coinage, small lumps of recognized metal were accepted. "A piece of silver and a loaf of bread" were payments suggested in I Sam. 2:36. And when the servant of young Saul, who had gotten lost while searching for lost asses, came to the prophet Samuel, he said to Saul, "Behold, I have in my hand the fourth part of a shekel of silver: this will I give to the man of God, to tell us our way." This quarter-shekel of the tenth century B.C., we reiterate, was not a coin but a weighed portion of silver.

Sometimes both barter and exchange of metal figured in a business transaction. It is well at this point to recognize some matters of definition. "Barter" is "traffic by exchange," the transfer of one commodity of known value for another of equal worth. Barter is being revived in the Middle East today, where edibles and other staples are being exchanged between communities. "Currency" is money in actual use, with prevalent legal tender; it may or may not be coins; it is sometimes mere lumps of metal with known value. "Coins" are "pieces of metal made into official money by having the authorized stamp of a mint upon their face." Therefore, we see that authors of the Bible meant by "money" more than we do when we speak of coins or currency.

In Egypt, where metal rings were customary, payment of taxes to overlords of the Nile Valley was also made in terms of measures of corn, pottery, and other goods carried by long lines of attendants. We see fine examples of this in the famous bas-reliefs (with touches of color) lining the Tomb of Ti at Saqqarah. They furnish graphic evidence of trade procedures in Fifth Dynasty Egypt (c.2400 B.C.). Joseph, when he had cornered the money of the famine-stricken Egyptians, said, "Give your

cattle: and I will give you for cattle, if money fail." (Gen. 47:16).

Also in Samaria of the ninth century B.C. we see both money and bartered units figuring in business. King Ahab, coveting Naboth's vineyard to make an herb garden, offered him money or "better vineyard" (I Kings 21:6). This was two centuries before coined money appeared.

Metal was never the exclusive unit of value in Old Testament times. Abraham, Jacob, and Lot reckoned their wealth in terms of thousands of cattle and camels, sheep and oxen. So, too, the wealth of the enigmatic Job of Uz consisted of "seven thousand sheep, and three thousand camels, and five hundred yoke of oxen," etc. (Job 1:3). Just as silver jewelry and lumps of ancient amber worn about the necks of women in the lonely Desert of Beersheba today constitute their inherited capital, so, too, in Old Testament times, the Children of Israel reckoned their booty captured from the Midianites in "jewels of gold, ankle-chains, and bracelets, signet-rings, ear-rings, and armlets" (Num. 31:50). Women of ancient Bethlehem wore their dowry coins on their head attire, a custom still seen in this Christian hilltop town.

BABYLONIAN AND PERSIAN MONEY AMONG HEBREWS

Probably the first actual coins used by Israelites were ones they acquired during their Babylonian Captivity. During the forty-eight or more years of their sojourn between the rivers Euphrates and Tigris they engaged in trade and were not too heavily oppressed. Upon their return to rebuild the Temple at Jerusalem, they carried money with them—something which not even their mighty kings David and Solomon had known. Their hoard would have included some of the famous gold darics, from the word *dara* meaning "king" (not Darius the Great, in particular), and silver shekels, known as "Median shekels," weighing almost eighty-seven grains. The daric was a pure gold stater of about 130 grains, valued at something like the English gold pound. The Persian siglos were about half the weight of the light Babylonian shekel.

EARLIEST JEWISH COINAGE

William F. Albright, in *Bulletin No. 53* of the American Schools of Oriental Research, describes some rare extant Hebrew silver coins from the fourth century B.C. In spite of certain numismatists' contention that these coins are not genuine, we agree with Albright that silver coinage existed. Three Hebrew coins are of the fourth century B.C. (one with Hebrew, two with Aramaic inscriptions). Thus we are led to believe that under the Persian regime, during which many of the Hebrew religious practices culminating in the ways of Jesus developed, high priests of the little Judean state were permitted to strike their own coins and to levy their own taxes. This gives us a bit of insight, says Albright, into an obscure period of Jewish history. He is convinced that in the Maccabean period, it was John Hyrcanus (135-104 B.C.), and not his father Simon, who first instituted bronze coinage in this brief Jewish independent period of the second century B.C.

The Jews tended to be slow in making coins because of their hesitancy about stamping the image of men or animals, in violation of the second commandment. No Hebrew coins were issued after the fall of Jerusalem in A.D. 70. There were never any gold Hebrew coins. Joppa may have been a Jewish coinage center, as Byblos was Phoenician. Syrian Antioch coined money, and Sepphoris in Galilee issued autonomous bronze money in the time of Jesus (Roman era).

An interesting series of Jewish coins has been unearthed at Beth-el, a site more often mentioned in the Bible than any other except Jerusalem. These coins date from c.100 B.C. to A.D. 68.

THE SANCTUARY SHEKEL

The sanctuary shekel figures prominently in Old Testament narratives. According to the Mosaic law (Ex. 30:13-15) everyone who left Egypt was expected to pay not only this sacred shekel, but also as a "ransom for his soul unto Jehovah . . . half a shekel after the shekel of the sanctuary (the shekel is twenty gerahs), half a shekel for an offering to Jehovah . . . the

rich shall not give more, and the poor shall not give less . . . to make atonement for your souls." The law states that "all thy estimations shall be according to the shekel of the sanctuary: twenty gerahs shall be the shekel" (Lev. 27:25). Atonement money was used "for the service of the tent of meeting."

The earliest sanctuary shekels were probably weighed money. In New Testament times the sanctuary shekel was the Phoenician-Hebrew coin.

NEW TESTAMENT MONEY

PALESTINIAN

A picture of the money in the cash-drawer of any great Jerusalem merchant of the first century might include:

1. A few old Persian silver siglos or gold darics equivalent to about one English sovereign, brought back to Jerusalem by returning captives from Babylon. These were the first minted money ever used in Palestine. The first Jewish shekels are attributed by some scholars to the period of Ezra; and the beginning of Jewish coinage, to resumption of community life centering about the restored Temple.

2. Small bronze and silver coins struck by Maccabean John Hyrcanus.

3. Independently minted coins from the great Phoenician mints at Tyre and Sidon, especially shekels and tetradrachms. (A half-shekel equaled about one Greek didrachm; a whole shekel, one Tyrian tetradrachm.)

4. Elegant Greek silver and gold coins from the period of trade expansion under Alexander the Great throughout western Asia in the fourth century B.C., such as silver drachms (didrachms and tetradrachms), gold staters, copper obols (1/6 drachm), and leptons (smallest Greek coin).

5. Standard coins of the Roman Empire, authorized by currency reforms of Caesar Augustus at beginning of Christian era. These alone were acceptable for government taxes. They included: the silver denarius, the most-used coin of New Testament times in Palestine (mentioned at least sixteen times in the New Testament, a day's wage for average laborer, equivalent

to about the Greek drachm, also called the "shilling"); the brass dupondius; copper as (one-sixth of a denarius, called also "penny"); half-as (semis); quarter-as (quadrans, called also "farthing"); the gold aureus (equivalent to about one English pound).

6. Ptolemaic Egyptian Coins, locally minted at Gaza, Joppa, Acre, and Sidon. The silver tetradrachm bore the smiling face of a Ptolemy, the eagle of Zeus, and the name of the mint. Others were the didrachm, or silver shekel or stater (standard coin), and the gold octodrachm.

James H. Breasted says that the "first Ptolemy issued the first state coins of Egypt." Previously, taxes had been payable in goods as well as money (by weight), or by some of the many foreign coins from Greek and other mints. Many of these have been found in modern times at Damanhur and elsewhere.

For photographs of denarius, lepton, drachm, tetradrachm, aes, shekel (stater), "tribute penny," see illus. 90.

ROMAN MONEY

Copper coinage in Italy began at the close of the fifth century B.C. Rome issued her first silver in 268 B.C., after the fall of Tarantum. In that year the Romano-Campanian series began.

When Caesar Augustus came to power just before the opening of the Christian era, he found Roman money so depressed and disorganized that he suspended issues for a time. Abandoning the mint at Rome he set up a new one independent of the Senate, at Lugdunum, capital of his rich western province, Gaul.

At Lugdunum, Augustus minted gold for the whole Empire and silver for the West, allowing Syrian Antioch, Alexandria, and other cities to issue silver for local use in the East. Spain and Africa also he allowed to mint local issues.

GREEK COINS

Roman money contributes rich facts about the conquests, customs, and religion of the energetic peninsula people. Some of the best portraits extant of Alexander the Great, Vespasian, Antiochus Epiph-

anes, and Tiberius are on Roman coins (illus. 90). But for artistic worth the Greek coins of the Mediterranean world are superior.

These are difficult even to know in a superficial way because of their great variety. The privilege of minting was granted in the centrally-controlled Roman Empire to many generals and governors. But in the Greek city-states coins tended to be parts of one of three great monetary systems through the centuries. The following tabulation may be oversimplified, but it helps us understand something of the Greek coinage:

Gold system, based on gold staters (standards) of Croesus and the Persians.

Silver system, whose silver staters were first made by the island "pedlars" of Aegina.

Bronze system used by Greek cities of Italy and Sicily, probably copying from earlier inhabitants.

The drachm (handful) of obols, or skewers, comprising first Greek money, was important all through New Testament times.

Most Greek coins bear religious symbols. These may indicate that they were struck at a temple, which frequently was the business center of the community, ready to grant loans and receive estates. Or the symbol may have been a pious gesture to the god whose figure, or mark, was struck, in the hope that this deity would bless the business transaction. Thus the rose on the obverse of Rhodian coins refers not to the "Island of Roses" alone but to Helios, god of sunlight. The ports of Paul gleamed with the beauty of thought-provoking Greek coins.

Some scholars believe that the first Greek money was due to the business influence of the Phoenician goddess Astarte, whose cult spread to every Mediterranean port where commerce flourished.

Silver money was to the Attic Greeks what gold was to Lydia. They extracted the metal from their rich mines at Laurium which are still operating on the rocky peninsula between Athens and temple-crowned Cape Sunium. They succeeded in making their handsome coins current among Mediterranean neighbors. Aristophanes said that these rang true wherever

they clanked against a marble table. Even barbarians knew and coveted them. Albright believes that, as early as 450 B.C., Greek coins were rapidly replacing older varieties in western Asia. Francis W. Hirst, in *Money*, claims that Athenian "owls" were among the most beautiful coins ever issued by a state, ancient or modern, although they were rivaled by several coins of Greek cities in Sicily. The tetradrachms of Alexander, Antiochus Epiphanes, and other rulers bore portraits.

Athenians, who had a habit of carrying their small coins in their mouths, would have none of the beautiful Sicilian bronze ones. These "did not taste good" and were too large and heavy. Coins too small to be named were labeled *ae*, meaning "bronze."

Greek tetradrachms coined in various cities about 150 B.C. featured the head of Alexander the Great and other rulers in the guise of Alexander on the obverse, with the god Heracles wearing a lion's skin and carrying a club, on the reverse.

Gold coins were first struck at Athens in 407 B.C. The Greek fleet had been destroyed at Notium, and it became necessary to melt down the golden "Victories" of the Acropolis and make them into money—clumsy gold coins, in contrast to the fine Greek silver ones.

Gold coins were not popular. By the time access was secured to the gold mines of Thassos (463 B.C.), Greek silver had the call.

At Corinth where Paul worked as a cloth-weaver, the Apostle no doubt received in payment some of the famous Corinthian coins bearing the curly-winged horse, Pegasus. Corinth minted her coins as early as c.650 B.C., earlier than Athens made her famed Athena owl, and olive-twig species. Following the Battle of Marathon (490 B.C.) Athens always put an olive wreath and crescent on Athena's helmet.

Lindos in Rhodes, in whose harbor Paul probably dropped anchor, was coining staters of Phoenician weight in the sixth century B.C.

The market places of Athens, where Paul interviewed those he hoped to convert to Christ, fairly jingled with beautiful coins. Leslie Shear, American excavator of the Athenian Agora, reports a total of 80,000

coins found in that area alone—down wells, among temple rubble, and along the streets. The oldest is a silver drachm of the Attic standard discovered among pottery of the sixth century B.C., of the type minted between 572 and 561 B.C. It was in perfect condition.

This same Agora investigation revealed several ancient Greek business transactions. An auction list advertised the effects of Alcibiades, the brilliant and reckless Athenian deserter to whose perfidy was due the downfall of the Athenian Empire (404 B.C.) following the glorious age of Pericles. This "for sale" list had been posted in the Eleusion. Another interesting business document found in the Agora near the Tholos was a decree in honor of a commission which had been selected to buy equipment—furniture, mattresses, and bowls—for the Tholos (dining room for senators) in the second century B.C. Also, an Athenian tribute list showed payments made by cities of the Hellespont (Black Sea region) to Athens from 430 to 429 B.C. And a list of the people who had contributed to the repair and defense of the walls of this fair city was found.

Archaeology has revealed dramatic commentaries on ancient history.

HOARDS OF COINS IN BIBLE LANDS

Like the man in Christ's parable who buried his money in the earth (Matt. 25:25), financiers facing enemy invasion tended to hide vast numbers of coins in the ground. They were safer there than in the Bank of Greece in the fall of 1939.

Vast hoards of both Roman and Greek coins have come to light under the spade of the archaeologist. Among these are the Epidaurus silver hoard, the Five Greek Bronze Hoards buried in c.280 B.C.; and the Roman find at Bosco Reale including more than 1,000 Roman aurei and much-worn coins from Augustus through Vespasian.

The journal *Hesperia*, Volume 8, tells of an amazing "Hoard of Greek Federal Silver" consisting of 677 coins bought from a dealer in Athens, who believed it had been buried in an island off Preveza. Probably the hoard had been concealed soon after the collapse of Achacan auton-



72. Bethlehem women at vegetable market.

73. Curbstone letter-writer at Nablus.





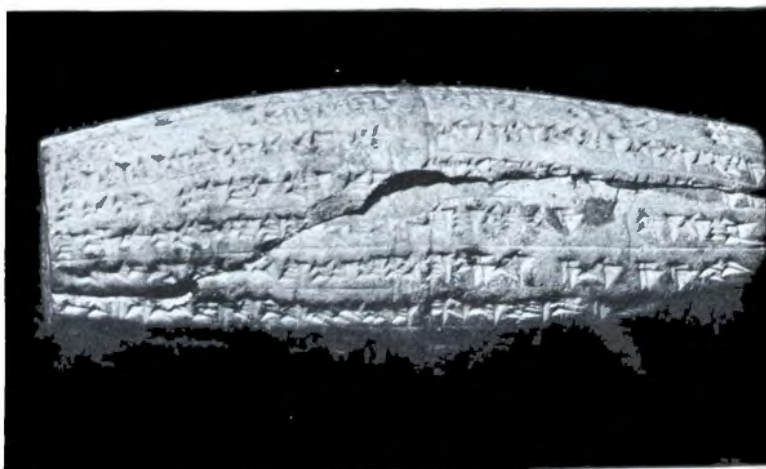
-4. Man writing on clay tablet, with stylus, in cuneiform. His signature has been made by rolling a cylinder seal over tablet while wet. *Dr. E. R. Lacheman*



-6. Cone shaped clay document, cuneiform scribed, from U^r. (*Barbara Bowen*)



-5. Babylonian clay tablet with its envelope, from Nippur (c.1900 B.C.) in reign of Samsuiluna. (*University Museum, Philadelphia*)



-7. Drum shaped clay document from Babylon, era of Nebuchadnezzar. Cuneiform inscription. (*Rev. Barbara Bowen*)



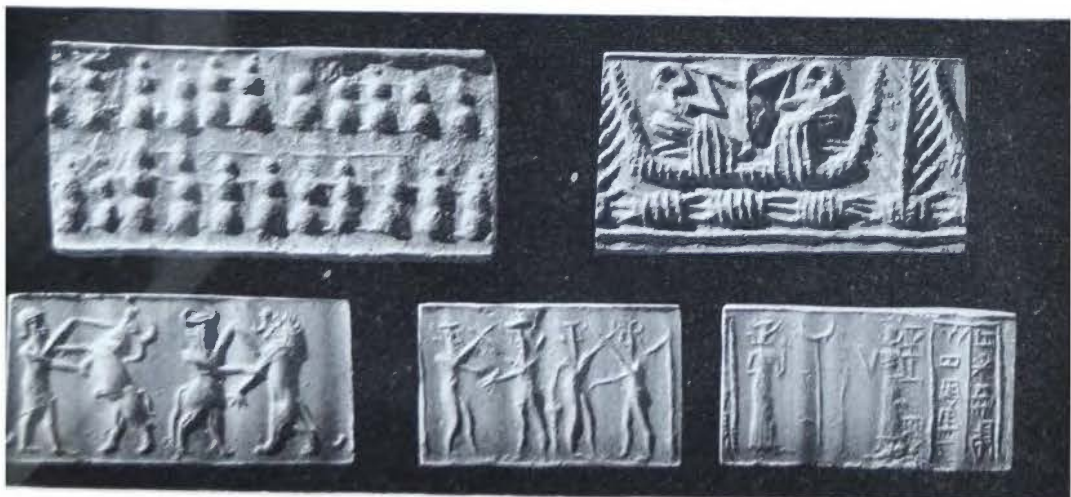
Left. clay tablet from archives of the Temple of E-barra in Sippar, written in Neo-Babylonian in seventh year of Nabunaid (549 B.C.), eleven years before the conquest of Babylon by the Medes and Persians under Cyrus. Belonging to class of "administration" or bookkeeping tablets, it records regis-
trations of offerings to the temple of linen wraps, girdles, and material by the
linen guild.

Right. clay tablet carrying official letter from the priest of the Temple of Shamash, the sun-god, notifying supervisor of the supplies for the temple that allotted barley has been dispensed to the temple treasury workers through
the foreman. This tablet is in Neo-Babylonian, written in Sippar in the
seventh year of Darius, King of Babylon (497 B.C.). (Metropolitan Museum of Art)

Below. Cuneiform clay tablet listing regular pay-
ments on leases held by tenant farmers on land
granted to the Temple of Shamash, the sun-
god. The rent was ordinarily paid in farm pro-
duct; in this case, dates. Written in Neo-
Babylonian at Sippar in fourth year of Cyrus,
King of Babylon (527 B.C.). (University Mu-
seum, Philadelphia)



Below. Collection of cylinder-seals from Sumerian Ur, showing development of various types of sig-
nature made on wet clay tablets. (University Museum, Philadelphia)





81. The Forum Romanum, which evolved from the ancient market place and trading center at Rome. At left, the Temple of Vesta, where Vestal Virgins, daughters of patrician families, watched by day and night the sacred fires. Right, the Palace of Vestals. Upper right, the Arch of Titus, with Colosseum to left.

82. A first-century corner shop in Italian Herculaneum. Money actually found close by is in the case on the counter.





83. Vast Square of the Guilds, or ancient Chamber of Commerce, at Ostia, first colony of Rome, its harbor, and seat of vast organization of food supplies of the capital. At center of the Square is a temple, dedicated perhaps to Ceres, goddess of grain. Between the columns of internal portico, various Latin countries had offices of commercial agents, whose signs appear in mosaic pavement of the external portico, used as a public thoroughfare. These mosaic inscriptions furnish an imperishable page in the commercial history of Rome.

54. A vaulted shop in market place of Corinth, with archaic Temple of Apollo, seen daily by Paul during his sojourn, looming left.





85. *Mensa Ponderaria*, in the official department of measures, in forum at Pompeii.



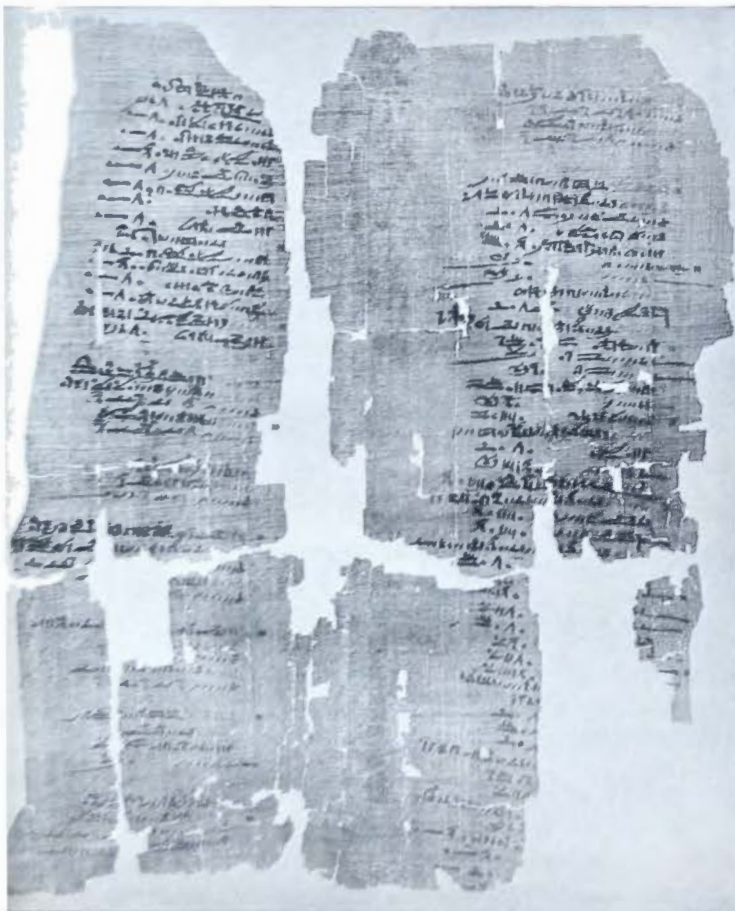
86. An Arab merchant from Hebron in his tiny shop among the sùks of the Muristan section of Jerusalem.



87. "Good measure, pressed down, shaken together, running over" (Luke 6:38). American Colony, Jerusalem)



88. Hebrew stone measuring vessel, a demi-omer, containing about 4 pt. Found in property of Notre Dame de Zion, Jerusalem (Ex. 16:36).



89. A page from the Wilbour Papyrus, a hieratic document from reign of Ramesses V, c.1150 B.C., now in Brooklyn Museum. This Egyptian document contains "more information about land tenure and assessment of land than we ever dreamt of recovering." (Brooklyn Museum)



Simon Maccabi
Aes (137-135 B.C.)

Procurator Felix

First Revolt (66-70 A.D.)
Widow's Mites

"Tribute Penny"
(Denarius)



Tiberius
(15 A.D.)



Herod Agrippa (37-44 A.D.)



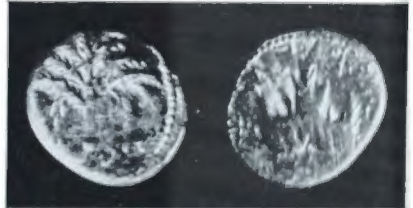
Rome
Vespasian
71 A.D.
Judaea Capta
(Sestertius)



Second Revolt Shekel
132-135 A.D.



Bacchus Judaeus (54 B.C.)



Second Revolt Aes



Antioch
Time of Christ

Ephesus

Vespasian's
Judaea

Corinth (65 A.D.)



Tarsus
561-333 B.C.
Stater)

Alexander
(Thracian
Tetradrachm
302-284 B.C.)

Antiochus
Epiphanes
175-164 B.C.
Tetradrachm

97. Some typical coins of Bible times. ("Stack's")

omy following the Roman invasion of 146 B.C. It includes currency from twenty-two members of the Achæan League and from Peloponnesian cities of the third and second centuries B.C., and gives clues to dates when these Greek city-units joined the League. Coins from Corinth show the winged Pegasus; from Athens, Athena and her wise owl. One coin presents a fine head of Atalanta, wearing a modern-looking beret, the Greek *causia*.

FINANCIERS IN BIBLE TIMES

Taxgatherers such as Matthew the Publican secured by fair means or foul the right to gather taxes for Rome in Palestine. Taxes had to be paid at Capernaum on the basis of the Roman denarius. Matthew probably had his toll booth along the busy caravan road from Syria to Galilee (Matt. 9:9).

Money-changers were denounced by Christ because of their excessively high rates for changing into the Phœnician-Hebrew sacred shekel for the Temple tax (Mark 11:15) the many kinds of currency brought in by Jews arriving "from every nation under heaven." The high priest, such as Annas, had every opportunity to share profits with the money-changers. The "pieces of silver" given to Judas for the betrayal of Christ possibly came from the coffers of the high priest and his colleagues—thirty Phœnician tetradrachms (about 120 denarii). A Roman denarius was about eight English pennies or sixteen cents, whence "d." for "penny."

Bankers and usurers were wealthy men who loaned money for mortgages, purchases, or financial emergency. There were Old Testament laws against lending money at usury except to foreigners: "Thou shalt not lend upon interest to thy brother; interest of money, interest of victuals, interest of anything" (Deut. 23:19). Nehemiah (5:6-12) persuaded deputies of Persia to leave off their usury so that people could again get possession of their homes and vineyards. Babylonian rates of interest ranged from 12 to 20 per cent; at Athens, in the fifth century B.C., they jumped from 12 to 20 per cent. At Rome interest was lower at the beginning of the

Christian era, because of easy capital. In Roman provinces rates were heavy.

Christ in his Parable of the Pounds refers to banks (Luke 19:23).

Coins tell eloquent stories. For example, a Jerusalem coin with the initials L.X.D. recalls that when the forces of Titus left the city in A.D. 70, they left the tenth legion behind as a "Gestapo" garrison. The standard of the Tenth Legion which was set up over the ruins of the destroyed capital bore a sow, an "abomination" in the holy city of the Hebrews. So, too, the coins of the trade empire of the Nabataeans at Petra tell the story of her commercial development. Professor M. I. Rostovtzeff of Yale calls attention to Nabataean coins bearing the symbol of deities, citizens, kings, tribes, and commanders of cavalry divisions who protected the caravan routes of the rock-cut city east of the Jordan.

IDENTIFICATION OF COINS MENTIONED IN NEW TESTAMENT

"Get you no gold . . . in your purses" (Matt. 10:9).

"Silver and gold have I none" (Acts 3:6).

"Gold" refers to a Roman gold coin, the aureus.

"Show me the tribute money. And they brought unto him a denarius" (Matt. 22:19).

Possibly this denarius bore a head of Tiberius on its obverse; and a seated god on reverse. The superscription would refer to the Caesar whose image it bore. The Roman denarius and Greek drachm had similar value. A denarius was equivalent to about sixteen cents or eight pence.

"thou shalt find a shekel: that take and give it unto them for thee and me" (Matt. 17:27).

"they weighed unto him thirty pieces of silver" (Matt. 26:15).

Here is meant the silver Greek stater, or tetradrachm of Antioch and Tyre, used as Temple tax for two Jews (the Phœnician Hebrew shekel).

"Or what woman having ten picces of silver" (Luke 15:8).

They were Greek drachms, part of the woman's dowry.

"rich men were casting their gifts into the treasury" (Luke 21:1).

Note the small value of the rich men's gifts—perhaps the copper chalcous of Alexander Janneus.

"a certain poor widow casting in thither two mites" (Luke 21:2)

A "mite" was perhaps the copper lepton of Janneus, equivalent to about one-quarter cent (illus. 90).

"till thou have paid the last farthing" (Matt. 5:26)

This may have been the tiny brass quadrans of Pontus.

"Are not two sparrows sold for a penny?" (Matt. 10:29)

Perhaps the as or small brass quadrans was meant.

"Are not five sparrows sold for two pence?" (Luke 12:6).

The reference may be to the diminutive copper as, or assarion, weighing about one-half oz.

"Lord, the pound hath made ten pounds more" (Luke 19:16).

The Greek talent was 6000 denarii or drachms.

"two hundred shillings' worth of bread is not sufficient for them" (John 6:7).

"this ointment might have been sold for above three hundred shillings" (Mark 14:5).

"and on the morrow he [the Samaritan] took out two shillings, and gave them to the host" (Luke 10:35).

The shilling erroneously translated "penny," (A.V.) was the Roman denarius, less than the American quarter—about sixteen cents.

The Gospel of Matthew has especially numerous allusions to money.

PURSE

When Jesus "charged them that they should take no money in their purse"

(Mark 6:8), he meant that they should not take even the small brass coins in their girdle, a pocket in which constituted their purse. The custom of carrying money in this sort of belt explains why so many coins were lost by the wayside and are still being found by Palestinian farmers. *Fellahin* near Tekoa have come running to us, offering interesting Roman coins they had just upturned in their grainfield.

MEASURING UNITS

WEIGHTS

The forms which ancient peoples gave to their units of weight offer material for an interesting study.

Some very old Assyrian weights in the form of metal lions are owned by the British Museum. With wide-open jaws and upswung tail, these animals carry on their left side a symbol denoting the weight represented, as "Fifteen manchs of the country." On the left side of each animal are fifteen strokes. The weights are in terms of Phoenician units, and the cuneiform inscription carries the name of the Assyrian king in whose era they were cast. The weights, therefore, appear to have been made by Phoenician merchants who had settled in Assyria in the eighth century B.C. To make the weight of the cast lions honest and accurate, bits were chiseled off or filled into the hollow body.

Another interesting series of old Babylonian weights is in the form of stone and marble ducks.

Hebrew weights, like those of other Mediterranean peoples, were based on units of Egypt, Babylonia, and Phoenicia.

Hebrew patriarchs probably had bags containing stone weights. We see such bags referred to in Prov. 16:11: "All the weights of the bag are his work." In Micah we read: "Shall I be pure with wicked balances, and with a bag of deceitful weights?"

Egypt boiled down an original seventeen weight units, taken from various sources, to eight, of which the cone-shaped *qedet* was the standard. The *qedet* came in, according to Flinders Petrie, about the end of the prehistoric age. It was retained down to the Roman period. An

older Egyptian weight unit, the beqa, has been found in prehistoric graves. It was based on the gold standard of the Amraian Egyptians. The people of the prehistoric Early Gerzean Age used clay lumps with black lines for their weights.

Babylonian weights, used widely in Palestine and Syria in the fifteenth century B.C. (as indicated in the Tell-el-Amarna tablets) were:

Mina (7.580 grains)
Shekel ($1/60$ mina)
Talent (60 minas)

For ordinary merchandise there was also the "heavy shekel," double the weight of the light. One gold shekel was worth ten silver ones.

Phoenician units were widely used after the Hebrew conquest. They were among the most current ones in heavy Mediterranean trade:

Phoenician shekel, heavy (224 grains)
Phoenician shekel, light (112 grains)
Mina (50 shekels)
Talent (60 minas)

Greek weights were:

Stater ($1/50$ mina)
Mina (50 staters)
Talent (50 minas)

Roman weights were:

Drachm
Shekel (4 drachms)
Mina (25 shekels)
Talent (120 minas)

SCALES

The weigh-masters were influential and responsible officials. An interesting cuneiform clay letter in the British Museum written by one King Burraburia of Karaduniash to Amenhotep IV of Egypt, complains that twenty manchs of gold which had been sent him by the Egyptian ruler did not stand the weight-test when tried in the furnace.

Honesty of weight and measure is repeatedly stressed in the Bible. The Levitical laws decreed: "Ye shall do no unrighteousness . . . in measures of length,

of weight, or of quantity. Just balances, just weights, a just ephah, and a just hin, ye shall have" (Lev. 19:35, 36).

Ezekiel also stressed: "Ye shall have just balances, and a just ephah, and a just bath. The ephah and the bath shall be of one measure, that the bath may contain the tenth part of a homer, and the ephah the tenth part of a homer; the measure thereof shall be after the homer. And the shekel shall be twenty gerahs; twenty shekels, five and twenty shekels, fifteen shekels shall be your maneh" (Ezek. 45: 10, 12).

The prophet Amos at the corrupt court of Israel denounced "making the ephah small, and the shekel great, and dealing falsely with balances of deceit; that we may buy the poor for silver, and the needy for a pair of shoes" (Amos 8:5,6).

This same scrupulous matter of not only a fair measure but a generous one, is emphasized in the New Testament in the words of Jesus: "good measure, pressed down, shaken together, running over" (illus. 87).

The Egyptian influence of "weighing the heart" on a scale, balancing it with the deeds of the deceased in the presence of the god Osiris, was extensive in art and literature of the ancient East, as we see in illustrations from *The Book of the Dead*.

The old book of Proverbs enjoined: "A just balance and scales are Jehovah's"; and "A false balance is an abomination unto Jehovah."

CAPACITY MEASURING

When excavations were in progress a few years ago on Mount Zion, Jerusalem, directed at finding the House of Caiaphas, the explorers of the Assumptionist order of Notre Dame de Zion happened upon an olive press, and, near that a complete set of the dry and the liquid measures of the ancient Hebrews. This pointed to the residency near-by of the high priest whose staff had measured the offerings brought into the Temple by worshippers. The measures, treasured today in the Notre Dame Museum in Jerusalem, weigh about two tons.

The Hebrew liquid measures were:

Measure	Approx. Equivalent	Reference
Log	.88 pt.	Lev. 14:10
Kab	2 qt.	II Kings 6:25
Hin	10.56 pt.	Ezek. 4:11
Bath	7.98 gal.	Ezek. 45:14
Cor	90 gal.	Ezek. 45:14

The Hebrew dry measures were:

Measure	Approx. Equivalent	Reference
Log	1 pt.	Lev. 14:10
Kab	3.55 pt.	II Kings 6:25
Omer	7.2 pt.	Ex. 16:36
Seah, or Measure	1.5 pk.	Gen. 18:6
Ephah	1 bu.	Ezek. 45:11
Homer	11 bu.	Isa. 5:10

In illus. 88 there is pictured a Hebrew dry measure, the half-omer. This was actually used about 3,000 years ago in Jerusalem and was accidentally found recently during an excavation. It is of rust-color stone. Two handles of the original four remain. It is a rare piece.

Roman measures are clarified when we see the "Mensa Ponderaria" of Pompeii, found in a niche of the outer wall of the Temple of Apollo, adjacent to the Forum and markets. A marble table, with urn-shaped depressions, served at this official measuring center on the basis of Roman capacity standards (illus. 85). Possibly the units contained beaten-copper linings. Roman measures were:

Quartarius (c.8.86 cu. in.)
Sextarius (4 quartarii)
Congius (6 sextarii)
Uma (4 congii)
Amphora (2 umi)

LINEAR UNITS

Babylonian units of land measurement are made vivid by two series of tablets in the British Museum, inscribed about 2500-2100 B.C. in the reign of late kings of Ur in first Babylonian dynasty. They are lists of fields in estates and surveys of arable land near rivers and canals of southern Babylonia, where changes in stream beds affected boundaries.

The principal Babylonian land measures were:

Gin
Sar = 60 gin
Can = 1,800 sar

The principal corn measures were:

Gin
Ka = 60 gin
Gur = 300 ka

It is not easy to work out the modern equivalents of these units.

The Egyptian linear unit was the cubit based on the length of a man's forearm. The divisions were:

Palm (7 palms or 28 fingers made 1 cubit)
Hand (5 fingers)
Fist (6 fingers)
Finger = c. $\frac{3}{4}$ in.
Handbreadth (4 fingers)
Span (3 handbreadths)
Cubit (2 spans) = 22-26 in.

Hebrew linear units were based upon the Egyptian.

Roman units were the mile (4,854 ft.); the furlong, (c.606 ft.). The "Sabbath day's journey," mentioned in Acts 1:12, indicates a distance of c. 3,600 ft. from the Mount of Olives to the city of Jerusalem.

ADDITIONAL BIBLE REFERENCES

There "passed by Midianites, merchantmen" (Gen. 37:28)

The "king's merchants received them in droves" (II Chron. 1:16)

Daniel, satrap at Persian court of Cyrus, "rose up, and did the king's business" (Dan. 8:27)

"What pledge shall I give thee? And she said, Thy signet and thy cord" (Gen. 38:18)

The "king took the ring from his hand, and gave it to Haman" (Esther 3:10)

Jezebel "wrote letters in Ahab's name, and sealed them with his seal" (I Kings 21:8)

"is changed as clay under the seal;

"And all things stand forth as a garment"
(Job 38:14)

"So they went, and made the sepulchre
sure, sealing the stone" (Matt. 27:66)

"the seal of my apostleship are ye in the
Lord" (I Cor. 9:2)

"the firm foundation of God standeth,
having this seal, The Lord knoweth them
that are his: and Let every man that
nameth the name of the Lord depart from
unrighteousness" (II Tim. 2:19)

"we make a sure covenant, and write it;
and our princes, our Levites, and our
priests seal unto it [are at the sealing of
it]" (Neh. 9:38)

"a book . . . sealed with seven seals" (Rev.
5:1)

"he bought the hill Samaria of Shemer for
two talents of silver" (I Kings 16:24)

For story of the Joash Offering Chest see
II Kings 12:1-12 and II Chron. 24:1-14.

"come ye to the waters, and he that hath
no money; come ye, buy, and eat; yea,
come, buy wine and milk without money
and without price. Wherefore do ye spend
money for that which is not bread? and
your labor for that which satisfieth not?"
(Isa. 55:1, 2)

"they have sold the righteous for silver,
and the needy for a pair of shoes" (Amos
2:6)

"the Pharisees . . . were lovers of money"
(Luke 16:14)

For dimensions of the ark, in cubits see
Gen. 6:15, 16.

For dimensions of the altar in the Taber-
nacle see Ex. 27:1.

For dimensions of Solomon's Temple see
II Chron. 3 and 4.

For dimensions of Jerusalem Temple of
Cyrus period, see Ezra 6:3.

For cubits of wall repaired, see Neh. 3:13.
Cubits measured on Sea of Galilee (John
21:8)

Measure of a man's life (Matt. 6:27)

"gather (manna) . . . an omer a head"
(Ex. 16:16)

"two omers for each one" (Ex. 16:22)

"good measure, pressed down" (Luke 6:
38)

"with what measure ye mete, it shall be
measured unto you" (Matt. 7:2)

"took and hid in three measures of meal"
(Luke 13:21)

BIBLIOGRAPHY

- British Museum, *Guide to Babylonian, Assyrian and Egyptian Collections*.
Burns, A. R., *Money and Monetary Policy in Ancient Times*, Trubner and Co., London.
Chiera, Edward, *They Wrote on Clay*, University of Chicago Press, Chicago.
Clay, Albert T., *Babylonian Business Transactions of the First Millennium B.C.*, Yale University Press, New Haven.
———, *A Hebrew Deluge Story in Cuneiform—and Other Epic Fragments in the Pierpont Morgan Library*, Yale University Press, New Haven.
Engberg, Robert M., and Shipton, Geoffrey M., *Notes on the Chalcolithic and Early Bronze Age Pottery of Megiddo*, University of Chicago Press, Chicago.
Frankfort, Henri, *Cylinder Seals*, Macmillan & Company, Ltd., London.
Gardner, Percy, *A History of Ancient Coinage (700 B.C.-300 B.C.)*, The Clarendon Press, Oxford.
Gordon, Cyrus H., *The Living Past*, The John Day Co., New York.
Grant, Elihu, "Ten Old Babylonian Contracts," *The Haverford Symposium on Archaeology and the Bible*, American Schools of Oriental Research, New Haven.
Head, Barclay V., *Historia Numorum*, Clarendon Press, Oxford.

- Hill, George Francis, *Catalogue of the Greek Coins of Palestine*, British Museum, London.
 ———, "Thirty Pieces of Silver," *Archeologia*, 1905.
- Hirst, Francis W., *Money*, Charles Scribner's Sons, London.
- Macdonald, George A., *Coin Types*, University of Glasgow, Glasgow.
- Madden, Frederick W., *Coins of the Jews*, Trubner and Co., London.
- Marston, Sir Charles, *New Bible Evidence*, Fleming H. Revell Company, New York.
- Mattingly, Harold, *Coins of the Roman Empire in the British Museum*, British Museum, London.
- Meek, T. J., "The Present State of Mesopotamian Studies," in *Haverford Symposium*, American Schools of Oriental Research, New Haven.
- Miller, Madeleine S., and J. Lane, *Cruising the Mediterranean*, Fleming H. Revell Company, New York.
- Newell, Edward T., *Royal Greek Portrait Coins*, Wayte Raymond, Inc., New York.
- , "The Coinage of Ancient Palestine," *Art and Archaeology*, Vol. VII, No. 5-6, June, 1918, pp. 206-211.
- Petrie, Sir Flinders, *The Making of Egypt*, The Sheldon Press, London.
- Porada, Edith von, "Catalogue of Mesopotamian Cylinder Seals in Pierpont Morgan Library" (in preparation).
- Reinach, Theodore, *Jewish Coins*, Lawrence and Bulla, London.
- Rogers, Edgar, *A Handy Guide to Jewish Coins*, Spink and Son, Ltd., London.
- Scott, John W., *Coins of the Bible*, Scott and Co., New York.
- Seltman, Charles, *Greek Coins*, Methuen & Co., Ltd., London.
- Shear, Josephine, "Coins of Athens," *Hesperia*, II, pp. 231-78, 1933; VIII, April, June, July, September, 1939, Princeton.
- Ward, John, *Greek Coins and Their Parent Cities*, John Murray, London.
- Williamson, George C., *Money of the Bible*, Religious Tract Society, London.
- Wright, G. Ernest, *Bulletin No. 86*, p. 34, *American Schools of Oriental Research*, New Haven.

CITIES, TOWNS, VILLAGES

He looked for the city which hath the foundations, whose builder and maker is God.

—Heb. 11:10

He went on his way through cities and villages, teaching, and journeying on unto Jerusalem.

—Luke 13:22

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Lystra; Antioch, Myra, Patara; Lindos,
Miletus, Ephesus, Smyrna, Pergamum,
Troas; Neapolis, Philippi, Thessalonica,
Beroea; Athens, Corinth, Cenchreae;
Rhegium, Puteoli, Rome

Cities "Between the Rivers"

Ur, Erech, Lagash, Eridu, Tepe Gawra,
Mari, Kish, Babylon, Nineveh, Calah,
Susa (Shushan)

Cities of Egypt

On (Heliopolis), Memphis, Alexandria,
Daphnae, Thebes (No)

Cyrene and Sardis

Additional Bible References

Bibliography

INTRODUCTION

SEEKERS FOR CITIES

Cities of Bible lands were never large in comparison with modern metropolitan areas housing 8,000,000 souls. Seven acres was an exceptional size. But cities developed earlier than it was for centuries supposed. The first ones were evidently along the Mediterranean coastal plain and in the Jordan Valley.

There are more than 1,000 references to cities in the Bible, exclusive of allusions to individual towns. The location of some of the most important is still disputed among able archaeologists. Confusion is the worse because people moved town sites but retained old names. Reference is made to many cities throughout our text, under Archaeology, Defense, Landmarks of Jesus, etc. Even to mention all of these would make the present chapter a Baedeker. Consult Index.

AMARNA AND BIBLICAL LISTS

From the Tell-el-Amarna Letters, written in Babylonian cuneiform c.1400 B.C. by petty governors of Palestine and its environs to their Egyptian masters, Amenhotep III and Akhenaton, we glean the names of many Palestinian settlements which are also mentioned in the Bible. Jerusalem, under the name of Uru-salim, "City of Peace," is among them.

John Garstang, in *The Heritage of Solomon*, offers a unique list of chief cities, gleaned partly from the Letters and partly from the Bible. He notes on the coastal plains and border hills: Aijalon, Ashdod, Ashkelon, Azekah, Beth-shemesh, Debir, Eglon, Gath, Gaza, Gerar, Gezer, Yarmuth, Lachish, Libnah, Makkedah, and Lud. On the north coastal plain he lists Dor, whose ruins on an admirable site near Crusader Athlit we have seen on the green Plain of Sharon, south of Haifa. In Esdraelon and vicinity he includes Ara, Ib-learn, Jokneam, Megiddo, Nahalol, and Taanak. In the Plain of Acre he finds Acco (Acre), Achshaph, Achzib, Harosheth, Mishrephoth-Maim, and Rehiv; in Galilee, Bath-anath, Beth-shemesh (Kadesh), Madon, and Hanathon. In the upper Jor-

dan Valley the list includes Abl, Hazor, and Laish, with Beth-shan, Adam and Jericho in the lower Jordan Plain. The list concludes with central plateau towns; Shechem, Shiloh, Dothan, Ai, Beeroth, Bethel, Bethhoron, Gideon, Hebron, Jerusalem, and Kirjath-jearim. These settlements are more numerous in the coastal plain and the highlands near Jerusalem, with fewer in the northern Plain of Sharon, as we have noted in motoring from Carmel to Joppa.

All through the Old Testament we find a wistful longing by nomadic Israel for the security which comes from community living on settled sites barricaded against foes. The high, fenced strongholds of the Canaanites, such as northern Hazor, were looked upon with dread and envy by the hungry Hebrew bedouins subsisting on rain cereals. Long before the conquest, a deep-implanted yearning for a city type of abundant living was in the soul of Abraham. He had come from a very great city, Ur of Sumer, in the rich, muddy lands of Shinar Plain beside the Euphrates. He had voluntarily, like many exiled idealists today, "become a sojourner in the land of promise, as in a land not his own, dwelling in tents . . . for he looked for the city which hath the foundations, whose builder and maker is God" (Heb. 11:10).

The wandering Hebrews coveted a "city of habitation" (Ps. 107:7), where the hungry could dwell

And sow fields, and plant vineyards,
And get them fruits of increase.

—Ps. 107:37

Returning from exile in Babylonia in the fifth century B.C., Jews considered residence in Jerusalem itself so desirable that they cast lots to see which man in every ten might have this privilege, and which nine should take up residence in "the other cities" (Neh. 11:1).

Even nomads of Transjordan today go into walled hilltop towns after their heavy summer threshing. We have seen them in the highlands near Heshbon and Madaba getting ready for that great transition which made their forebears turn from fellahin, or farmers, to belladin or town dwellers. The Emir Abdullah of Transjordan himself takes to his gorgeous tent

for a part of each summer, so deeply ingrained in him are the traits of the Arab bedouin. But he gladly returns to the amenities of his palace at Amman to entertain foreign dignitaries.

VILLAGE, CITY, AND SUBURB

Farm villages tended to spring up in groups of mud-brick or stone homes. And even when cities—defined as having walls, gates, towers, chief rulers, and fixed places of worship—became well established, these had groups of towns hanging on their fringes. Time and again we read of “six cities and their villages,” or “Gaza, its town and its villages”; Ekron, with its towns and villages”; and fourteen cities of Judah and “their villages.” An example today of clusters of villages looking to a near-by town for government is found in Magdala, el-Lubiyeh, and Hattin, which are attached to Tiberias on the Sea of Galilee.

Villages were market-outlets for surrounding farms.

The word “suburb” often associated with names of large towns or cities (Lev. 25:34), does not mean a settlement of aristocratic dwellings such as the suburbs of New York or Los Angeles. Old Testament suburbs were grazing lands, adjacent to towns. An example is the rich territory below the anciently settled town of Bethlehem. Shepherds’ villages such as Beit Sahûr there, where flocks still graze after the summer crops are reaped, help us visualize the shepherds in the nativity-night narrative of Luke 2. The inheritance of Issachar included “sixteen cities with their villages” (Josh. 19:22). “All the cities of the Gershonites according to their families were thirteen cities with their suburbs” (Josh. 21:33).

Cities of Palestine were compactly built for defense. Size averaged from six to ten acres. Jerusalem covered about eleven less than mighty Megiddo and Shechem. Hazor was still larger, commanding with its sixteen acres routes north into Syria. Gezer sprawled over fifteen acres. In times of stress, unwalled villages poured their populations into strong cities. This is the custom today when water supply fails on the outskirts.

Many cities of Bible lands were given familiar epithets, “pet names”: Jerusalem, “The city of the great king” (Ps. 48:2); “Jericho, city of palm trees” (Deut. 34:3); the strong city of “Tyre that dwelleth at the entry of the sea” (Josh. 19:29); “Hebron in the hill-country of Judah” (Josh. 21:11); Bethlehem, “the city of David” (Luke 2:4); “Bethsaida . . . the city of Andrew and Peter” (John 1:44); Jerusalem, the “city which Jehovah hath chosen out of all the tribes of Israel, to put his name there” (I Kings 14:21); “Jerusalem the holy city” (Neh. 11:1); and Damascus, “the city of my joy” (Jer. 49:25). Babylon was “the great city.” A “city set on a hill” (Matt. 5:14)—possibly Safed or Jerusalem itself—and “Caphernaum, which is by the sea” (Matt. 4:13) were proverbial.

Just because a village was in a land of the Bible did not mean that it was civically or morally lovely. The Psalmist indicated that villages had “lurking places,” where innocent ones were secretly murdered (Ps. 10:8). From some such lurking place probably emerged the iniquitous desert men who foully murdered the brilliant British archaeologist, J. L. Starkey, en route from his excavations at Lachish mound to Jerusalem in 1938.

CITIES OF THE JORDAN PLAIN

Cities of the Jordan Plain included Sodom, possibly near the southeast corner of the Dead Sea, and its neighbor, Gomorrah, in a well-watered garden spot such as flourished in Babylonia. Today, under the chemical-impregnated contents of this richest body of water on earth, evidence of a material sort is lost. The weird salt pillars and mirage-filled topography in this vicinity give colorful hints to our imaginations as we ponder the evil ways of Sodom. At the gate of this city Abram’s nephew Lot was sitting (Gen. 19:1) when he was visited by two angels warning him to escape before doom of brimstone and fire and smoke fell upon the town.

Sodom and Gomorrah had a Chalcolithic history (c.4000-3000 B.C.), antedating other city sites of Palestine. Sodom had its king Bera and Gomorrah its monarch Birsha who took part in the four-

kings-versus-five kings war. Lot, "Abram's brother's son, who dwelt in Sodom," became a prisoner and was rescued by the "three hundred and eighteen" trained men of Abraham's entourage, who sought them as far as Dan, northernmost town of Palestine (illus. 128). These two cities along the Dead Sea ultimately disappeared through tumultuous forces of nature, probably an earthquake. The area possessed a very early town culture and left behind some sun-dried brick, hand-woven pottery, evidences of copper tools, and woven materials. Zoar was the place to which Lot fled when "God destroyed the cities of the Plain" (Gen. 19:29). It was near the south end of the Dead Sea, also, probably amid woods and pastures. Admah, referred to not only in the Genesis account of the overthrow of these cities of the Jordan Plain but also in Deuteronomy, was cited as an example of wickedness completely punished. It was cited, too, in Hosea as a classic warning to wicked eighth-century Israel: "shall I make thee as Admah?" The fifth city of the Plain was Zeboiim.

Albright, who explored this region, was convinced that the catastrophe recorded vividly in Gen. 19:25 occurred in the early Bronze Age. His observations confirm the very early biblical tradition of the settled prosperity of the densely populated cities of the Plain in five oases well watered by fresh streams when Abraham arrived in the patriarchal age (not earlier than c.1800 B.C. probably).

A most interesting recent discussion of the cities of the Plain appears in *The Biblical Archaeologist* for September, 1943, by J. Penrose Harland. He gathers together the biblical and the geological material about this weird rift south of the Dead Sea and links the catastrophe, with its attendant explosions of gas, general conflagration, subsidence of the Plain, lightning, seepages of asphalt, and pools of petroleum, with interest taken by the Iraq Petroleum Company in the twentieth century A.D. We trust that this business enterprise will not contribute to World War III with attendant catastrophes to cities of the Plain and their neighbors. When we looked at the weird saline and alkaline "pillars" reminding us of the

Dakota Bad Lands, we thought time and again that we saw Lot's wife in a backward-glancing "pillar of salt."

CITIES FOR WANDERERS

TOWNS OF THE PATRIARCHS

The saga of the patriarchs, which Albright calls "extraordinarily accurate," lists several towns which have been archaeologically verified as existing in the Bronze Age of Abraham and his family—Shechem, Beth-el, Ai (?), Jerusalem (Salem), Gerar, Dothan, and Beersheba. Hebron may also prove to contain corroborative material when excavated. Albright maintains that if we insist upon a later date of composition for the patriarchal stories, in the monarchy of the Iron Age, we should expect to find the Israelite towns, such as Mizpah and Gibeah, indicated, and this is not the case. For references to towns associated with the patriarchs see Gen. 12:6, 7; Gen. 35:1-8; Gen. 13:18.

CITIES EAST OF JORDAN

Nelson Glueck's brilliant explorations and excavations east of the Jordan for several years report more than seventy villages existent in those rich highlands from 3500 B.C. to the twelfth century A.D. He states, "It is now well known that the earliest settlements in Palestine were on the coastal plains and in the Jordan," which, as Lot observed it (Gen. 13:10) "was well watered everywhere." Glueck estimates that thirty-five miles along a fertile stretch of the Jordan had a population of 35,000 or 40,000 in comparison with the 12,000 Arabs who live in this area today. With many of these Transjordan towns, wandering Israel was familiar. Glueck's volume of *Explorations in Eastern Palestine* examines the biblical cities of the Plains of Moab in detail, using observations of 1943 and before. He says concerning them in *Bulletin No. 91 of The American Schools of Oriental Research*, October, 1943:

"It has been seen that they were all located at the east edge of the Plains. They were always built on easily fortified

and usually isolated hills, dominating perennial streams and strategic roads. The question of security was obviously paramount in the minds of the settlers at the beginning of the Iron Age. They chose sites for their towns and fortresses which might guard the fertile, irrigated plains from which they gained their sustenance. During the early Iron Age each settlement was strongly fortified, whether located in lowlands or highlands. The Edomites, Moabites, Ammonites, and Israelites lived throughout their entire Early Iron Age in a state of actual or expected danger. It was an age in which fortress walls had to be built high and strong, and perpetual watch kept for lurking enemy."

Wandering Israel, after many encampments, came to "the plains of Moab by the Jordan" (Num. 33:48). Glueck in *Bulletin* No. 91 of the American Schools, describes this plain as being shaped like a truncated harp, with its north formed by the Wadi Nimrin and its south by the Wadi el-Azeimeh near the northeast end of the Dead Sea. This area is watered by perennial streams and includes biblical sites which Glueck has identified.

Albright stated in *Bulletin* No. 58 of the American Schools of Oriental Research:

"The first territory to be conquered by the Israelites in Transjordan, according to a very solid tradition (despite Eduard Meyer's hypercritical attitude), was the kingdom of Sihon, in the region north of the Arnon, around Heshbon. This land was mostly plain country, with rolling hills in the north, open to sedentary occupation. None of the fortified towns of this district is mentioned either in the Amarna Tablets or in the Egyptian lists and other documents of the New Empire, a fact which suggests that Sihon's kingdom was established after the Amarna period. The regions of Moab and Edom to the south were almost entirely unoccupied by a sedentary population until the thirteenth-twelfth centuries B.C., as Glueck's explorations have convincingly proved. The land of Sihon has not yet been so carefully examined, and the most important sites, such as Heshbon and Madeba, are covered by such an accumulation of late debris,

that nothing can be decided without elaborate excavations. However, it is a district which was so well suited by nature for sedentary occupation, that all a priori considerations favor acceptance of the Hebrew tradition and its connection of this phase of the Conquest with Moses. What was the date of this movement?"

We have been impressed by the Old Testament atmosphere of people's faces and fields in the tablelands east of the Jordan where the Joseph tribes of wandering Israel won their first settled sites probably in the thirteenth century B.C. in spite of the haughty non-co-operation of King Sihon of the Amorites. Madeba (Medeba) is mentioned in Josh. 13:16 and I Chron. 19:7. It appealed to us not so much because it boasts a mosaic map of the sixth century A.D.—possibly an attempt to depict the vista of Moses from near-by Mount Nebo; or because it was headquarters for Lawrence and his Arabs while Allenby was making the Jericho—Es-Salt road fit for his troops to march on to Jerusalem in 1917. But Madeba was eloquent of the rich land Moses "assigned" to children of Reuben 3,000 ft. above the Mediterranean and 4,000 ft. above the Dead Sea. There every man of Israel had his task. There social laws which governed Israel for many generations were worked out experimentally. We seemed to see in furrows of Madeba the tracks of Israel's homemade wagons, full of "little ones" and aged, and the hoof-marks of their oxen. We felt that here thirsty Israel was refreshed, for Madeba possibly means in Hebrew "gently flowing waters." We had an overpowering sense of the pilgrim personality of Moses, going with us as we proceeded to Nebo and Pisgah. Omri, who held Madeba for forty years, seemed less vivid.

Heshbon, just north of Madeba, was capital of Sihon of the Amorites, who had seized it from the Moabites (Num. 21:26). Its history caused the old writer of Numbers to break into poetry, "Come ye to Heshbon." "Heshbon with its suburbs," which here must have been superb grazing land, is listed as given to the Levites together with "Ramoth in Gilead." Succoth (not Egyptian), men-

tioned as "given" to the tribe of Gad (Josh. 13:27), was north of the Jabbok, roughly opposite Shechem.

Because of kindness of the men of Jabesh-gilead in coming to Beth-shan across the Jordan to remove the bodies of King Saul and his sons from the Philistines' walls, we are glad that Nelson Glueck identified in 1943 the site of this town at the twin mounds of Tell el-Meqberreh and Tell Abū Kharaz, where the Wadi Yabis works its way west to the Jordan through the rift of the Ghor. The latter mound is the high fortress site from which Beth-shan can actually be seen. The lower Tell el-Meqberreh was a residential quarter of the city. Glueck, in *Bulletin* No. 91 of the American Schools of Oriental Research, points out that a man walking fast could in an hour reach Beth-shan from Jabesh-gilead. Glueck found quantities of Early Bronze and Early Iron Age potsherds in the vicinity of these two mounds. The burial of Saul's bones "under the tamarisk tree in Jabesh" is recorded in I Sam. 31:13.

Chief prize of Israel among the cities east of Jordan were Rabbath-ammon (illus. 92) and the mighty cities of Bashan, kingdom of the giant Og—"three score great cities with walls and brazen bars" (I Kings 4:14). Among these Bashan cities was Bozrah, on a main caravan route across the Syrian Desert from Damascus to Rabbath-ammon on the route from Nineveh and Babylon. Bozrah became a member of the "wider Decapolis" circuit, a strong Greek center in later centuries, famous for its sheep, its wool, and cloth, its oaks, and its tall citizens.

For Ezion-geber, see Business Transactions and illustration 34.

CITIES OF THE OCCUPATION

Many details are given in the books of Joshua and Judges about Israel's successful seizure of Jericho, "city of palm trees," on a site ideal then and now, and for perhaps 100,000 years. It is backed by the heights of the Wilderness of Judaea and fed by springs leaping out from its hills. It is watered by Jordan irrigation whenever man's industry has taken advantage of natural provisions. Its soil and warm

climate are conducive to cultivation of fruits and grains. No wonder such luxury-loving personalities as Cleopatra and Herod enjoyed wintering at Jericho. They followed in a train leading back to cave dwellers.

As we looked at the earthy mound (Tell es-Sultan) of this little city which has yielded unbelievable knowledge of its past to archaeologists of several nations over a long period of years, we accepted its claim to being "the oldest city of Palestine," with nineteen explored levels of human habitation. Town life began here at an extremely early date, long before Joshua and his men saw the walls fall down as they marched around in victory after the earthquake or other timely provision of God. Albright, formerly of the American School at Jerusalem, and John Garstang, of Liverpool University, have been among the most thorough students of the intriguing mound of Jericho. We felt debtor to them as we walked carefully over the powdery levels of this tiny tell near the spring (illus. 122) which determined its first occupation in the dusk of man's prehistory.

Mrs. Garstang washed 40,000 pieces of pottery each year during their excavation, so that these priceless, if unlovely, fragments might unlock secrets of forgotten artists. Slowly, on the Jordan Plain at Jericho, as at the Carmel Caves of Wadi el-Mugharat overlooking the Plain of Sharon (illus. 136), a sequence of facts was pieced together, extending far back into prehistory from the much-disputed date of the conquest by Israel. Some of the homes of Neolithic Jericho antedated brick and were built of mud in slabs or bulk.

Garstang states that Jericho fell to Israel c.1400 B.C. Père Vincent is at the opposite end of the date list, with 1250-1200 B.C. Albright, always welcoming new information, revised his date downwards from 1375 B.C. to c.1235-1200 B.C. He recently wrote the authors of this book, "Better not assign any date for Jericho's fall for the last time before the Israelite occupation; archaeologists disagree." Albright's present date for the Exodus is "probably c.1290 B.C."

Ai, whose "conquest" is described in

Josh. 8. may have already been in ruins in Joshua's time. Excavations suggest that Ai was unoccupied between c.2000 and 1000 B.C. The battle account of Josh. 8 may refer to Beth-el, not Ai. Mme. Marquet, exploring Ai, found in a temple ruin imported Egyptian alabaster from near the end of the Early Bronze Age. Her research extended into the levels of the twenty-sixth century B.C.

East of Jericho, across the Jordan some twenty miles away, an extremely early town site, at *Teleilat el-Ghassul*, has been studied by excavators who as yet are unable to discover what its original name was. But they have found impressive evidence of most early culture in frescoes and other art efforts. McCown's account of this Ghassulian center in his *Ladder of Progress in Palestine* is enlightening.

JOSHUA'S VICTORY LIST INTERPRETED

When we read the amazing list of kings and cities subdued by Joshua, we realize that, although he was an able fighter who lived to a ripe age, he could scarcely have won all the Canaanite cities credited to him. These cities had such masters as the kings of Lachish, Eglon, Gezer, Megiddo, Carmel, Dor from "beyond the Jordan westward, from Baal-gad in the valley of Lebanon even unto Mount Seir . . . in the hill country, and in the lowland, and in the Arabah . . . all the kings thirty and one." Well might he frankly admit, "There remaineth yet very much land to be possessed, [all the] regions of the Philistines . . . all the land of the Canaanites and the land of the Gebalites [Byblos] and all Lebanon, toward the sunrising [Phoenicia]."

The lists in the Book of Joshua of cities conquered or "allotted" to Hebrew tribes are compilations from several sources, as Robert Pfeiffer points out in his *Introduction to the Old Testament*. The Baedeker-like roster of towns was written between the tenth century B.C. and 200 B.C. Yet the Book of Joshua is the best topographical material we have of this important historic period of the conquest, even if Joshua is not its author but its hero. Based on several documents—J, E, P, etc.—the

record of Joshua, although imperfect, is the best we have of the cities in which Israel settled in Canaan.

Despite the confusion in the Book of Judges, the account of the cities which gradually fell to Israel runs through with more or less clarity.

THE RISE OF CITY-STATES

Before the Hebrew monarchy in Iron Age Palestine, from the eleventh century B.C. on, many separate cities were small states ruled by local kings and citizen-assemblies with voice in decisions. Even the famous Hiram, ally and co-builder with Solomon, was known as "Hiram of Tyre" rather than "Hiram, King of Phoenicia." The five kings of the Jordan Valley cities were similarly independent chieftains. Petty local rulers had authority to make treaties and grants of land. King Achish made such a grant to David. They were the logical result of the patriarchal system which settled people down after nomadic wanderings. Saul was a rustic chieftain who became citified into a gloomy king.

As we shall indicate below, there were several notable leagues of city-states: the Decapolis League; the Philistine League; the Phoenician chain, linking powerful ports on the Mediterranean, such as Tyre, Sidon, Gebal (Byblos), Berytus, Tripolis, island Arvad, Dor on the Plain of Sharon, and Joppa. For the cities of the Philistine Plain and the Greek cities of the Decapolis, see pages 161-62 below.

ROYAL CITIES

These were centers of kingly government such as Hebron, Shechem, and *Rabbah* (*Rabbath bene-Ammon*). The latter, which is the only city of the Ammonites named in the Bible, is today Amman, capital of Transjordan. In New Testament times it was the northernmost of the Greek cities of the Decapolis League, twenty-five miles northeast of the Dead Sea. It was fed by fruits from the fertile Jabbok Valley. Its Old Testament history impressed us as we stood one morning beneath its acropolis. This citadel hill was in Bible times not only a "high place for worship but

a strategic pivot for military campaigns such as Abishai and his Israelite forces used to keep matters in hand while Joab was advancing for King David's cause against Madeba. The Book of II Samuel (11:1-17) chronicles the capture of Rabbath ammon by Joab. That battle is remembered for the death of Uriah the Hittite, who was put in the forefront to free his wife Bath-sheba to marry David. Amman, with its busy markets and picturesque streets thronged with Arabs, has the most impressive rock-cut theatre of Transjordan. It was constructed in the era when Ptolemy Philadelphus was rebuilding and renaming the city "Philadelphia" in the third century B.C.

Gibeon, "larger than Ai," was a royal Canaanite or more accurately, Hivite, city (Hurrian, Horite?), well located beside the highway from Jerusalem to Joppa. It was linked with Becroth, Chepirah, and Kirjath-jearim. Councils of elders of these four cities ruled and controlled the approach from the coastal plain in lieu of petty kings. The story of Joshua's conquest of Gibeon, whose inhabitants staged a ruse by dressing in torn garments and carrying stale food, to demonstrate that they had come from afar to seek alliance, is dramatically told in Josh. 9. The narrative seeks to explain why the Hebrews subsequently made them servant allies, "hewers of wood and drawers of water," even if they were not actually conquered. In Solomon's time, Gibeon was a favorite high place, in which the new king worshiped by burning more than a thousand sacrifices and dreamed that he was asking God for a wise and understanding heart, able to judge his great people justly.

Gibeah (see also Defense) was probably on the present Tell el-Ful, excavated north of Jerusalem. It was therefore not far from ancient Beth-el and Ramah, where David once visited the prophet Samuel, who made an annual circuit to Beth-el, Gilgal, and Mizpah. Gibeah was the birthplace of Saul of Benjamin. It later became the crude fortress-palace of this morose chieftain in whose audience hall young David played his lyre or harp and courted Saul's daughter, Michal, who became the wife of the musician-warrior. Excavated portions of Gibeah have been mentioned. A

fresh settlement had been made in ancient Gibeah not long after the Hebrew conquest. Even though Joshua had won what Garstang calls "a tactical victory" at Gibeah, the city did not surrender to Israel until the period of the monarchy (beginning in c.1028 B.C.). The excavations directed by Albright are notable. The *migdal*, or tower, of the fortress had seven phases of construction, the first stratum dating from the burning in the period of the judges (Judg. 20:40) and offering striking confirmation of an oft-doubted scriptural record. The second fortress Albright identified as "the wealthy peasant" Saul's residence, in the late eleventh century B.C.

Hebron was a royal city because for "seven years and six months" David reigned there as king (II Sam. 2:11) before his establishment in "the city of David"—the southernmost portion of Jerusalem. We do not hear much about Hebron after David's time. But it was always precious to Hebrews because in the patriarchal age Abraham had "dwelt by the oaks of Mamre, which are at Hebron and there built an altar to Jehovah" (Gen. 13:18). There in the tree-clad, hospitable hill country south of Bethlehem, Abraham's son Isaac was born. And there the Cave of Machpelah was purchased to be the tomb of his beloved Sarah. Considering the common heritage of Moslem, Jew, and Christian in the personalities of the patriarchs, we well understand the fanatical sanctity attached to the mosque over the cave by devout followers of the Prophet, who jealously withhold from all Jews the right to visit the graves of Abraham, Sarah, and other patriarchs and admit Christians only by compliance with rigid regulations. Portions of the outer, well-constructed stone wall enclosing the sacred shrine are allotted to Jews who here pray on Fridays as earnestly as at the Jerusalem Wailing Wall.

Shechem became a royal city, rebuilt by Jeroboam King of Israel after the division of Solomon's kingdom (I Kings 12:25). Long before, it had been assigned to Levites as a city of refuge (Josh. 21:20). Shechem is situated in a snugly protected pass between two Samaritan mountains, Ebal and Gerizim. The latter is

still most sacred to Samaritan worshipers who celebrate Easter, Pentecost, and Tabernacles with elaborate and ancient ritual on the heights and live at other times in the most squalid of Palestinian towns—modern Nablus, hotbed of political fanaticism. We find ourselves always thankful when we have motored safely through this pass, despite its temptations to halt again at the oldest Samaritan synagogue, which is tended by a fast-vanishing company of the “mongrel” race centered in Samaria after the Exile. The importance of Shechem (illus. 183) dwindled after the founding of Samaria, a short distance north on its superb hilltop, by Omri, King of Israel (887-876 B.C.). It had been occupied in the earliest times of which we have record. Shechem, which was fortified by c.2000 B.C., has yielded the mightiest Middle Bronze Age fortress yet unearthed in Palestine, according to C. C. McCown. It was mentioned in an inscription of Senwosret III recording one of the earliest Egyptian campaigns. Shechem was still in the hands of its original population in the time of Abimelech, late in the twelfth century B.C., states Garstang. Abimelech is he who was made king by the assembly of men under “the oak of the pillar [or garrison] that was in Shechem” (Judg. 9:6). But Israel was intermarrying freely with its citizens. In the list of Josh. 21-20, it was assigned to Levites as a city of refuge. It was an early cult center, but not antedating Shiloh. Its melodramatic history reaches a climax in Judg. 9 with the tale of a treacherous woman who tosses a millstone onto the king’s head in revenge for his burning a thousand men and women in a strong tower.

The royal city of Samaria, on its smug hilltop among rugged olive-bearing highlands, was founded and first beautified by Omri. At that time Israel had two factions, one clamoring for Omri, captain of their army then fighting Philistines, to succeed the evil usurper Zimri, and others calling for Tibni, son of Ginath. The kings of Israel were a not too distinguished lot. But Omri was chosen and at once began to lay out a new capital, where he reigned twelve years: “he bought the hill Samaria of Shemer for two talents of silver, and called the name

of the city which he built, after the name of Shemer” (I Kings 16:24). Omri paid several times as much for Samaria as Peter Minuit did for Manhattan island when he purchased it from the Indians.

Samaria lay only about forty-five miles north of Jerusalem, its great rival. Some of the Omri masonry persists today amid the superb excavation of this biblical city. Harvard University and other groups, which have included Kirsopp Lake, John Crowfoot, George Reisner, and the British School of Archaeology, have put the world in their debt for the fragments which trimmed the “house of ivory” against which Amos protested. Not less important are their identification of the broad-stepped approach to the Sevrans successors to Herod’s Augusteum and Basilica, grandiose in their hilltop setting (illus. 212), and identification of the Street of Columns originally built by Herod but restored by Severus. We can imagine the clamor of this city when Benhadad of Syria besieged it, arriving with hosts of chariots and demanding Ahab’s silver, gold, wives, and children (I Kings 20:3). There is no more arresting story of this period of biblical history. Israel puts to flight on horse the drunken northern monarch, who returns the next year, however, with even more chariots and “two hundred and thirty-two princes” to aid him. One of his servants said to the king, “Their [Israel’s] god is a god of the hills; therefore are they stronger than we: but let us fight against them in the plain, and surely we shall be stronger than they.” The chariot warfare of the ninth century B.C. required level plains to be effective. The Samaritans won, nevertheless. But for their compromise in accepting Benhadad’s surrender, for the sake of a booty of a few trading streets among the bazaars of Damascus, evil Ahab was rebuked by a disguised member of the guilds of God’s prophets (I Kings 20).

Volume I of *The Buildings at Samaria*, by Crowfoot, Kenyon, and Sukenik, was published in 1943 by the Palestine Exploration Fund. Consult this official report for factual material.

Of the various centers of government in Bible lands, Jerusalem remained the royal capital par excellence, “the city of the great king,” as the Psalmist rightly

termed it, whether he referred to Jehovah or to its civilian builders, David and Solomon. On its snobbish height on plateaus of several conjoining little wadies, this elevation, 2,500 ft. above the Mediterranean and 3,800 ft. above the Dead Sea, was scarp'd by natural rock for defense, (illus. 101) and by mighty walls, gates, and towers which delighted the builders of every royal regime (illus. 103). Jerusalem, under the name of "Uru-salim" (City of the God of Peace) seems always to have existed. Its priest-ruler Melchizedek (Hcb. 5:6) was too far back in antiquity to have even the customary genealogy of a Semitic hero ascribed to him.

Not the oldest of occupied sites in Palestine, Jerusalem is nevertheless mentioned under the name of Uru-salim in a Tell-el-Amarna Letter of c.1400 B.C. Thus it antedates both Rome and Athens by many centuries. Jebusite fortifications of c.2000 B.C. have left us traces of their existence. An ostrakon found at Luxor in 1925 bears a curse upon a Canaanite city which may be Uru-salim. When Judah and Simeon invaded from the south, the city had for its king Adoni-Bezek, who was captured. But the Hebrew invaders did not push out the well-entrenched Jebusites until the era of doughty David, whose men climbed the rock-cut watercourse to do the deed (II Sam. 5:8) (illus. 101).

The "new" towns of both David and Solomon were laid out by royal-capital specifications, even as eighteenth-century Washington was from the beginning designed to be the American capital. Jerusalem had no merchant ambitions like those of Petra, the caravan city. Yet Jerusalem had to enlarge the tiny space available at the summit of the plateau. Arches and masonry held up extensions built to take advantage of the juncture of the Hinnom, the Tyropocan, and the Kidron valleys. Jerusalem did not enjoy frontage on a great river, such as Memphis, Thebes, and Amarna had on the Nile, Babylon on the Euphrates, Nineveh on the Tigris, or Antioch on the Orontes. Yet, long after these fabulous merchant cities went down to heaps, Jerusalem persisted as a religious center that has been the goal of myriads of pilgrims for almost 3,000 years and will remain the dream-goal of

countless more Christians, Hebrews, and Moslems who yearn to visit it. An excellent view of Jerusalem, "beautiful for situation, the joy of the whole earth," appears in illus. 166. How impressively majestic behind creamy walls whose mellow tints blend into superb blue skies! How oddly compact, no larger than Central Park! Yet how knit into the revelation of our faith, from the hour when prophets prepared the cradle for Christendom, to the hour when the divine Infant was presented in the Temple, and the redeeming Saviour was affixed to a cross outside the walls. Those very walls cry out his story today, when the world hangs with bated breath lest the peace of Jerusalem be violated in the very quest of brotherhood. Neither Jew, Moslem, nor Christian should seek to monopolize political-religious control of Jerusalem. It belongs to the whole world of monotheistic faith. It should unite, not divide. It is the world's religious capital, more than Rome, London, or Mecca.

The authors of this book share the love of all these groups for the narrow, shadowy, stepped streets where no wheeled traffic can move. Secretive high stone walls of houses face one another across stone-paved and arched streets where blind men still tap their way as in the time of Jesus. Children still prattle as they go to school or to the Temple wells. Camels still tinkle their stately way through the spice market. Processions of worshipers every Friday trace their way along the Seven Stations of the Cross—an odd procession in which scientists, students, soldiers, and sailors join with garbed devotees of various orders of Christian faith. There is only one Jerusalem in all the world. It is golden from the Mount of Olives at sunrise (illus. 1). It is mystically lovely at night under the stars which Jesus saw lighting her domes. It is tumultuous unto death at high noon: we have seen a man murdered at Damascus Gate for far less than "twenty pieces of silver." Yet

Still stand those halls of Zion
All jubilant with song,
And bright with many an angel,
And all the martyr throng;
The Prince is ever in them,
The daylight is serene;



91. A village well in Palestine, teeming with life, noise, and news.

92. A caravansary on the edge of the desert at Amman, capital of Transjordan.





93. Panorama of Damascus, one of oldest still-living cities in world: "a silver spoon on green velvet." At lower right, an ancient threshing-floor.

94. Ships of Phoenician Tyre, "merchant of the people unto many isles" (Ezek. 27:3).





95. Panorama of Bethlehem, from the roof of the Church of the Nativity. Tower of Armenian portion, center, with Manger Square, beyond.

96. Street scene in modern Gaza (Gen. 10:19).





97. Excavated ruins of North African Cirene, founded in 632 B.C. (Luke 23:26; Acts 2:10; Acts 6:9). (Carlo Pfister)

98. Summer booths on roofs in the mud village of Migdal, site of Magdala, traditional birthplace of Mary Magdalene.



The pastures of the blessed
Are decked with glorious sheen.
—Bernard of Cluny, twelfth century

The personalities of mythical Melchizedek, King of Salem, of David and Solomon, and of Isaiah and Jesus still dominate the thought of all lovers of Bible lands who walk the streets of the little "City of David" (Millo) or stand pondering the stronghold of Herod's Castle, whose foundations remain at David's Tower by colorful Jaffa Gate. Jerusalem was the crown jewel of Hebrew hopes, the city built by Jehovah, in which was always preserved a remnant of the righteous on whom God established His kingdom through Jesus.

Damascus, capital of Syria through countless generations, must be rated as a royal city. It was the stronghold of many monarchs including Benhadad (I Kings 15:18), who had an unusual league with one Judæan king, Asa. "The head of Syria is Damascus" was truly said by Isaiah. Situated in a green, velvet oasis on the Syrian Desert's edge (illus. 93), at the foot of the majestic Anti-Lebanons it is well watered by small streams running through its thronged streets. Exclusive and picturesque in markets stocked by caravans since the beginning of history, Damascus maintains a fanatical mood as capital of an important Arab state, fanatical to the point of hurling stones at merchants and shops in senseless protest over the cost of bread. Such a disorder with its shower of sudden stones one day turned our car in an unanticipated direction. We wanted to go into the Jebel Druse country southeast of Damascus and found ourselves compelled to drive northwest to Homs and Krak des Chevaliers, because we dared not risk the Damascus street leading us out.

Damascus will always play a vital role in counsels of the Middle East. It boasts of being the world's oldest city with continuous occupation. It was historic long before Abraham came this way around the Fertile Crescent from Ur to Canaan. It was Paul's destination, on persecution bent, when he was suddenly halted on a burning desert road (illus. 197) and blinded with light by a mastering Christ.

For pictures of the east Gate of Damascus, the Street Called Straight, which was familiar to Paul, and the type of city wall from which he was lowered in a basket to escape Jewish tormenters, see illustrations 199 and 106.

General Sir Archibald Wavell, in his *Allenby, a Study in Greatness*, makes the keen comment that, while Damascus has always been associated with a warlike mood, its change of master has usually occurred as a result of a pivotal battle elsewhere. We have never been impressed by its defense works. Its long career of prosperity and influence has been based on its silk markets and caravansaries rather than upon its military power.

For royal cities in Mesopotamia, see below.

We need not look for royal cities among the Greeks.

Greece in the era of the Hebrew prophets of the eighth century was as much opposed to Kings and royal capitals as nations of the Middle East were insistent upon having them, evil and temporary though they were. Greece preferred autonomous and well-governed city-states, some of which leagued together under the most influential member. Athens headed the Attic League. The Delian League was so powerful that it maintained relations with Greeks in Asia Minor and the Aegean Islands. Religious councils, or amphictyonies, were vastly influential in this land that hated kings as much as the Near East favored them. Breasted called these Greek religious councils the closest approach the ancient world ever made to representative government. They controlled the Olympic games, the annual Feast of Apollo at Delos, the sanctuary island of the great sun-god, and his sanctuary at Delphi, whose oracles literally influenced history when momentous decisions impended. When Paul was in Athens and Corinth, these cities were under Roman rule.

SOME CANAANITE CITIES

What were some of the towering strongholds which terrified the questing Hebrews? The cities "great and goodly" of the tall Canaanites, cities "full of good

things" (Deut. 6:10, 11), included practically all the towns which later became Hebrew, for Canaanite levels have been found in almost all excavated sites in Palestine and Lebanon. See Index for references to Gezer, Hazor, Jericho, Hebron, Beth-el, Beth-horon, the Esdraelon strongholds of Megiddo and Taanach, Beth-shan in the Valley of Jezreel, and the southern fortress, Lachish. *Kadesh-naphtali* was home of Barak, colleague of the woman judge Deborah who precipitated the great Israelite victory over Sisera and the Canaanites. The story, recorded in Judg. 4:6, is a really significant milestone in the Hebrew conquest. The fall of the chief Canaanite chariot city at Hazor, near the now-cultivated swamps of Hulch in the north, marked the decline of Canaanite prestige and the ascendancy of the Hebrews toward their monarchy (from the eleventh century B.C.).

Canaanites had powerful royal cities, of which *Tell Beit Mirsim*, southwest of Jerusalem and east of Gaza, is a notable example. It was known in Bible times as *Kirjath-sepher*, the "City of the Book," although its excavated areas have failed to yield such clay tablets as *Ras Shamra* on the north coast and *Nineveh* have yielded. *Tell Beit Mirsim* was on the main caravan route from Egypt to Hebron. Its modern name, McCown indicates, means "the mound of the house of the fast camel driver." *Tell Beit Mirsim*, thirteen miles southwest of Hebron, was excavated from 1926 to 1932 by the Xenia Theological Seminary and the American Schools of Oriental Research. Israelites destroyed it c.1230 B.C. (Albright). It was situated in a large sheep-raising country where Nabal, contemporary of David, had his companies of shearers (I Sam. 25:2). Farmers turned over their large crops of wool to local weavers and dyers, or sold it to caravan drivers for shipment. Two of its most treasured finds, as Albright, who directed excavations, says, are two jar handles stamped: "belonging to Eliakim, steward of Yokin." Yokin (Joiachin) was the young Hebrew king carried off to Babylon in 597 B.C. by Nebuchadnezzar. Eliakim was possibly a steward who administered his property in the reign of Yokin's uncle Zedekiah (598-587 B.C.). Seals found else-

where have added missing links to a story too long to narrate here; finds corroborate the Bible narrative of the Exile period.

CITIES OF PHOENICIA

The stretch of exquisite coast land now included in the new Republic of Lebanon was Phoenicia in Bible times. It stretched north from the crescent-shaped Bay of Acre. With back-drop of superb Lebanon Mountains, the narrow country was sheltered and forced to face the Mediterranean, by which Phoenician ships sailed to Egypt as early as any boats plied this Sea of the Ancients. To Tyre, city of Hiram, we have referred elsewhere in text (illus. 94). This rich merchant city played its part in planting colonies as early as 1050 B.C. Cadiz in Spain was a Phoenician outpost at that date. Cities of Phoenicia reached their climax of sea power c.950-750 B.C., slowed down after Carthage was founded in North Africa (near modern Tunis). After their incorporation into Assyrian governments (c.767-688 B.C.), they fell to the "almost nothing" we find in both Tyre and Sidon today. Sidon, mother of "the virgin daughter Tyre" (Isa. 23:12), was one of the typical cities Phoenicians built on reef islands just off the mainland. Little causeways connecting them to the mainland could be cut in time of emergency and the enemy, with heavy chariot equipment, left stalled on the shore. "None knew," said Solomon, "how to cut timber like unto the Sidonians" (I Kings 5:6). They were famous for many other skills. Their shipping interest persists today in busy local craft we have seen being loaded at her wharves (illus. 94). Between Tyre and Sidon on the coast was *Zarephath*, visited by Elijah, and by Christ when he healed the daughter of a Phoenician (Canaanite) woman (Luke 4:26). The liveliest feature of this almost vanished town today is its threshing-floor where we have seen Mediterranean breezes separating golden chaff from the grain heads as the animals hauled the threshing-board over the crop. *Berytus* (now Beirut, with its great American University) does not appear in the Bible, but its superb harbor must have been teeming with Phoenician ships. It is listed in the Tell-el-Amarna Letters as having *Ammunira*

as its vassal-king. Gebal, or Byblos, to whose activity as a papyrus-manufacturing center we owe our word "Bible," is the most fascinating complex of ancient ruins on the Phoenician coast. See Index and illustration 37. of excavations. This great city, dominated today by the square tower of a medieval Crusader fortress-castle, in Bible times was an emporium for cedar trade, a famous stone-cutting center, and a humming production point for cloth and garments. It played a role in the Solomon-Hiram contract (I Kings 5:18). Commercial Byblos is mentioned at least six times (as Gubla) in the royal archives of clay tablets excavated at Mari on the Euphrates. These finds give rich, new information about this coastal region c.1775 B.C., as Albright indicates in *Bulletin No. 22* of the American Schools of Oriental Research.

Arvad, an island-city off the mainland, whose men were famous rowers (Ezek. 27:8) for Tyre, had a most unusual water supply. The system supplemented reservoirs of rain water by "tapping" powerful submarine springs in the Mediterranean off the coast, as Ellen Semple points out.

CITIES OF THE PHILISTINE PLAIN

The five cities of the Philistine Plain were at their height during the centuries of the Hebrew monarchy.

They may have been built about the time when Philistine immigrants and Hebrews alike were arriving from opposite directions on this bridgehead at the eastern end of the Mediterranean. For its possession Philistines and Hebrews had many a small but bitter contest. The five Philistine Plain cities are not mentioned in the Tell-el-Amarna Letters.

Gaza, like Damascus, flourished because it had a fertile setting on the edge of a desert and controlled caravan routes to Egypt, Arabia, and later, to Petra (illus. 96). Gaza gave us the word "gauze," from its manufacturing and dyeing of silks and cottons. It was the gateway to Asia as well as to Africa. Its venerable history has been plunged into by Sir Flinders Petrie and others. Ashkelon (Ascalon) was the next Philistine city north of Gaza. Even down

to Herod's reign and the medieval Crusades, this fortress on its rocky amphitheatre site dominated history. Judges 14:19 tells of Samson going to Ashkelon and slaying "thirty men of them." North of coastal Ashkelon lay Ashdod, inland on a caravan route east to Lydda and west to Joppa, a city whose commanding position on a low hillock at the widest part of the plain played a prominent part in the history of Bible lands. Besieged by Sargon of Assyria, as Isa. 20:1 records, and by Sennacherib and other aggressors, it struggled down through the Greek period of Pompey who gave her franchise. Ekron (Modern Akir), fourth city of the Philistine group, was a rich market town lying in the Valley of Sorek, about halfway between the Mediterranean and the highlands of Judaea. It is referred to several times in the Bible. It protested against sheltering the ark of the Hebrews when this sacred shrine was taken captive by Philistines (I Sam. 5). Gath was the fifth of the chain of Philistine cities. Its very site is unknown today, but evidently it lay nearest Hebrew territory, for it was raided by Israel more than any other Philistine town. Its strategic influence is suggested by David's warning not to tell in Gath the news of the death of Saul and Jonathan (II Sam. 1:20). The noted scholar, H. L. Ginsberg, believes Gath probably stood on a site now called "Sheik Ahmed el Areini," near the eastern border of the Philistine Plain.

One king of Gath, Achish, gave David, upon request, a town near Gaza, named Ziglag when the young warrior was harried by foes.

Near Gath was Moresheth, or Mareshah (Beit Jibrin) birthplace of the prophet Micah (1:1). Excavation of the adjacent Sandahanneh mound has shed light on the biblical history of this town (Josh. 15:44; II Chron. 11:8). C. C. McCown in *The Ladder of Progress in Palestine* reports the remarkable wall-paintings found at Mareshah (Marisa) in tombs of immigrants from Phoenician Sidon, probably in the third century B.C. and comments on the great culture of the Hellenistic city on this site.

Philistine influence survives today in the very name of Palestine, spelled by Arabs

"Filistin." The word "Palestine" seems to have been first used by Herodotus the Greek and later by Josephus and Latin historians.

CITIES OF THE DECAPOLIS

Of the ten cities of the Decapolis League, only one—Beth-shan or Scythopolis—was west of the Jordan. From this bastion commanding the approach to the river, the other Greek cities spread out fan-wise. They represented the onrush of Greek influence in the wake of Alexander the Great in the fourth century B.C. It is thought that the oldest of the ten Gentile cities, Pella and Dion, were established by generals of Alexander. Some authorities attribute the foundations of the latter to the brilliant Macedonian conqueror himself. Philadelphia (Rabbath-ammon, referred to above), and Gadara, which may be the scene of Christ's ministry recorded in Matt. 8, were fortresses by 218 B.C. For Gerasa (Jerash) see illus. 36.

Kanatha was on the edge of the desert on the great trade route to Arabia from Damascus, which venerable city was "an honorary member" of the league. Raphana may have been on the Yarmuk River. Hippos, together with Gadara, was presented to Herod by Augustus. Other cities were added to the original league of ten for protection of Greek immigrants against unruly Semitic peoples who tormented eastern Palestine. These were not controlled between 64 B.C., when Pompey established the Roman province of Syria, and A.D. 106, when Trajan established calm. The cities of the Decapolis appear in the "over Jordan" ministry of Jesus. Hearing reports of his helpful works "throughout Syria," great multitudes followed him from Galilee and Decapolis (Matt. 4:25). "They came to the other side of the sea, into the country of the Gerasenes" (Gadara? Gerasa? Jerash?). After Jesus had healed the demoniac dwelling among tombs there, the man "began to publish in the Decapolis how great things Jesus had done for him" (Mark 5:20). And, again, healing the deaf and the blind, Jesus came east from coastal Tyre and Sidon, to Galilee, "through the midst of the borders of the

Decapolis" (Mark 7:31). Jesus spoke Greek. He communicated his good news to the colonists in their own tongue. Although he never stressed the pompous architecture of these great centers, his beauty-loving nature appreciated the long lines of columned streets, graceful arches, and flowing fountains characterizing the cities of "Greece over Jordan."

CITIES OF SANCTUARY AND REFUGE

Before the earliest Hebrew kings held the people together, Shiloh as a central shrine cemented them. There Joshua had set up the Tabernacle, the site of whose keeping archaeologists hope some day definitely to establish. Shiloh was "Israel's first sanctuary" but not a "city of refuge." As Albright clearly indicates in his *Archaeology and the Religion of Israel*, it was the religious center which bound together the twelve tribes of Israel, making of them an amphictyony around a central shrine. We see such ties in the Greek Delphic Amphictyony of the ninth century B.C., and the Etruscan Amphictyony gathering once a year to celebrate games honoring the goddess Voltumna.

To the sanctuary city of Shiloh, once a year, as related in Judg. 21, families came at vintage time. They danced, courted, and worshiped, every family returning to its own tribal rule in "those days when there was no king in Israel: every man did that which was right in his own eyes" (Judg. 21). To Shiloh came Hannah and her husband Elkanah from their hill country home at Ramah each year to "worship and to sacrifice"; and to this sanctuary they brought their little son Samuel to train for priesthood under Eli. One of the sweetest stories in the Bible is this one, related in I Sam. 1:2, 3: "Samuel ministered before Jehovah, being a child, girded with a linen ephod. Moreover his mother made him a little robe, and brought it to him year by year, when she came up with her husband to offer the yearly sacrifice" (I Sam. 2:18, 19). Shiloh seems to have met disaster by fire at the hands of Philistines, as excavations have revealed, c.1050 B.C. After this the ark was moved to Nob, near Jerusalem, and later to

Kirjath-jearim. Shiloh had served its function of holding together the loosely knit twelve tribes for a century and a half after the conquest. See illus. 55, for a rare old earthen candelabrum found in a well at Nob, possibly of the Davidic period.

Cities of Refuge were six in number, designated early in the social organization of the Hebrew people to shelter fugitives who had accidentally killed a victim and sought to escape the only justice of primitive society, a life for a life. Three of the cities—Hebron (see above) in the southern Judaeen mountains, Shechem in the highlands of Ephraim (see above), and Kadesh in Mount Naphtali—were on the west bank of the Jordan. The other three, relatively opposite on the east shore of this watery dividing line, were Bezer, possibly near Dhiban; Ramoth-gilead, which may be Ramtha, southwest of present Deraa (Biblical Edrei); and Golan, not yet certainly identified but probably lying due east from Kadesh-naphtali. Ginsberg suggests that the last mentioned may be Sahem el-Jolan. These six cities, whose reputation was not at all marred by their harboring of refugees, were in charge of the Levites. Two of them, Hebron and Shechem, were “royal cities”; and Hebron was, in addition, a “priestly city.”

According to the law stated in Num. 35, an innocent person might continue to live in a city of refuge until the congregation had satisfied themselves concerning his innocence; he might remain there until the death of the ruling priest, when he would be free to return to his home locality. But if he left the refuge city before that time, and was apprehended, he would be responsible for his own fate. The Chronicler also lists cities of refuge, as being in charge of “the sons of Aaron” (I Chron. 6).

The altar at Jerusalem Temple also provided right of sanctuary. This ancient provision for justice lives on today in the English village of Stratford upon Avon. An iron ring on the church door was for centuries grasped by fugitives who thus gained shelter. Albright and certain other archaeologists believe that cities of refuge were part of the efficient state organized by David and Solomon. Albright says in

connection with the list of Levitic cities of Josh. 21 and I Chron. 6:54ff., “We may rather confidently attribute to David the allocation of Levitic cities, substantially as preserved for us in these passages” (*Archaeology and the Religion of Israel*, p. 121). John Garstang believes that cities of refuge did not develop until after the Exile.

STORE CITIES

IN EGYPT

Wealthy rulers of all well-organized kingdoms in Bible lands erected warehouses to contain their surplus crops and treasures. To erect such huge buildings required many man-hours under hot sun. The pharaoh who oppressed Israel, as indicated in the Genesis narrative, was probably Ramesses II, “the greatest boaster in history” (c.1301 to 1234 B.C.). These dates put the one we accept for the Exodus (c.1290 B.C.) within his reign.

Archaeologists have unearthed evidence of the “brick without straw” construction imposed upon Hebrew slaves by Pharaoh in his store cities, Pithom and Raamses (Ex. 1:11), located in Goshen, a district in northeast Egypt near the borders of Arabia and Palestine. We believe that in Goshen, possibly at On (Heliopolis), was the capital of the pharaoh under whom Joseph served as “prime minister” and to whom his aged father Jacob and shaggy brothers came to buy food. They would scarcely have gone farther south. The store city Pithom is believed to have been Tell Retabah, surrounded by massive brick walls enclosing an area 200 yd. square, with brick storage chambers of extensive size. Still-standing walls show a “brick-without-straw” texture here. Pithom may be derived from Pi-Tum (House of Tum, a solar deity). Raamses is believed to have been Tanis not far from the Hyksos center at Avaris, which fell into disrepair after the expulsion of the Hyksos and was rebuilt by Seti I. Biblical Raamses, or Tanis, may be modern Qantir. (See *Archaeology*, Section 4.) Albright believes that Tanis itself was the Hyksos capital (built c.1720 B.C.).

IN PALESTINE

SUPPLY DEPOTS AND CHARIOT CITIES OF DAVID AND SOLOMON

Not much more than two centuries after their ancestors were oppressed in Egypt, Hebrews themselves had kings powerful to organize their own store cities. Roles were soon reversed, and the subjected Hittites, Amorites, Perizzites, Hivites, and Jebusites (II Chron. 8) are made out to be bond servants, while the Hebrews were men of war, chief captains, rulers of chariots, and horsemen. The Chronicler relates how David's chamberlain in charge of treasures "in cities, and in the villages, and in the castles" was Jonathan, son of Uzziah. Under-supervisors had charge of vineyards, herds, camels, asses, and state forests of olive and sycamores (I Chron. 27:31).

But the chief builder of Hebrew store centers and especially chariot cities was Solomon.

In the official statement of Solomon's bureaucratic organization, the names of men responsible for his commissariat and the regions from which they were to gather royal food are listed (I Kings 4). The towns include Dor (on the coast south of Carmel); Taanach, (built c.950 B.C.); Megiddo and Beth-shan in the valleys between the Mediterranean and the Jordan; Ramoth-gilead; the "region of Argob, which is in Bashan, threescore great cities with walls and brazen bars"; and other unnamed towns in "the land of Gilead, the country of Sihon and of Og, king of Bashan."

Solomon's development of mighty Hazor, capital of King Jabin and greatest Canaanite stronghold in the north, was logical. The twelfth-century conquest of Hazor was a turning point in Hebrew history. This commanding chariot city features both the Joshua II narrative of united Israel's conquest and the Deborah-Barak-Sisera material of the Battle of Taanach, which is one of the oldest pieces of Hebrew literature and an unsurpassed Hebrew poem, one of the great battle odes of all time—written soon after the victory, which may be dated c.1150-1100 B.C.

Solomon must have taken satisfaction in equipping Hazor and Megiddo with stout stone hitching-posts and stone mangers for

his horses and chariots (illus. 21). Both of these pivotal sites had been hard strongholds for Israel to seize. After Hazor's capture, Israel was unified in the north as it had never been before. Garstang, of Liverpool University, identified the Hazor hitching-posts and put to an end the supposition that they might have had cultic significance.

Other chariot cities of Solomon were Acco (Acre), Achshaph, and towns at the frontier of Cilicia from which were imported many chariot horses. From matter excavated at Tell el-Hesi, this center in Southern Palestine is believed to have been another of his chariot cities. He probably used, also, Gezer, Beth-horon the Nether, and Tabor (Tadmor) for storage places as well as commerce-control points. For, like David, he maintained a bureaucracy for food supplies, levied month by month. He beautified Tadmor (later Palmyra) at the head of the Wilderness of Arabia. This city became a traffic center for caravan trade and grew fabulously wealthy under Queen Zenobia in the third century A.D. It served as buffer state to Syria, Asia Minor, and Egypt. The superb pathos of Palmyra's extensive ruins today challenges description. The Temple of the Sun, arched and columned with more than 300 pillars, suggests the fallen glory of this outpost of civilization 150 miles northeast of Damascus, halfway between the Orontes and the Euphrates.

CITIES OF JUDAEA

From Jer. 11:13 and from maps we might surmise that towns were as numerous in the territory of Judah as the false gods worshiped by the citizens. Yet there were few cities even in this choice highland allotment of land. Most of them achieved their greatness from spiritual personalities who influenced them. As Ralph Turner suggests in *The Ancient Cities*, great urban cultures of southwest Asia came in the brief 400 years from the ninth to the fifth century B.C., when Hebrews were producing an Amos (c.760 B.C.) and Isaiah (740 B.C.); Persians, their Zoroaster (c.660 B.C.); and Greeks, a Pythagoras (c.532 B.C.) and Socrates (c.469 B.C.). All were city dwellers as well as philosophers.

The open country has not been the only source of great-souled leaders, Amos of Wilderness Tekoa and Mohammed of the Arabian desert notwithstanding. Such culture as Hebrews possessed before the above-mentioned dates came from sharing with Aramaeans and, later, Phoenicians the Semitic cultural patterns of Accadians and early Babylonians in the Fertile Crescent centers, such as Ur, Erech, and Lagash. Egypt was also a source.

For Jerusalem, see page 158.

ROUND ABOUT JERUSALEM

The historic villages on the fringe of Jerusalem have rich biblical history. Many of them were captured early. *Beth-el* (Beitin), north of Jerusalem, is mentioned more times in Scripture than any other place except Jerusalem. *Mizpah* may be Tell en-Nasbeh, about eight miles north of the Holy City, on the road we follow south from Samaria. A strong pre-Roman wall was found there during several seasons of excavation. *Mizpah* has also yielded a perfect illustration of the overlapping walls at city-gate gathering places. To Ramah we have referred above. *Beeroth* (Josh. 15:25) was on the frontier between Judah and Benjamin. It has been suggested as the place where Mary and Joseph discovered that they had lost the child Jesus, on their way from Jerusalem. In Old Testament times it was probably a concentration point for people en route to their Exile in Babylon.

Anathoth, birthplace of Jeremiah, is just behind Gibeah, stronghold of Saul (Judg. 19:12). *Nob* was a priestly center. *Bethphage*, of the Palm Sunday narrative, is at the summit of the Mount of Olives and commands such a view of Jerusalem as appears in illustration 1. *Bethany*, where Jesus often refreshed himself at the home of Mary, Martha, and Lazarus, is south, a suburb of Jerusalem, just around the shoulder of the Mount of Olives (illus. 166). *Siloam* (Silwan) is across the valley from the "City of David."

BETHLEHEM, CITY OF THE STAR

Bethlehem, city of the star, was the birthplace of Jesus. Inhospitable it seemed

at first, with the door of the inn shut against his birth. But it was cozy enough when kindly neighbors received the peasant family and welcomed the three Wise Men from the East with their worshipful gifts. The angelic accompaniment of "Gloria in Excelsis Deo" and the shaggy adoration of shepherds from the field of Boaz are beautiful details of the nativity of Christ the King which we accept as truth.

If Jesus, or any other great Palestinian, had been deliberately planning a lyric, homey birthplace, he could have made no better selection than Bethlehem, well-stocked "house of bread" on the sunny ridge of the Judaeian plateau, near Jerusalem of the kings, Hebron of the patriarchs, and Tekoa of the prophet Amos. Bethlehem is five miles south of Jerusalem, and Tekoa twelve miles.

Today in Bethlehem children romp at play. Mothers enter, with stately tread, the current worship services conducted on the widely accepted site of the nativity (illus. 158). Prosperous trader-fathers engage in business at grain and animal markets. Christian enterprise and faith characterize this charming town, where enormous schools dignify the amphitheatre of hills. An energetic mayor conducts town business in his office on Manger Square. Daily papers bring from the press news of everything from prehistoric archaeological finds at Bethlehem to latest Arab-Jewish feuds. For illustrations of Bethlehem life, see illus. 71 and 72.

Bethlehem's 2,000 homes, looking like little cubes of white limestone (illus. 95), cannot be defied by centuries of use. They are charming to see as we approach their hillside foundations from Jerusalem Road. We halt at Wise Men's Well (illus. 227) with its Herodian water-pipe sections for curbs. We pause at Rachel's Tomb, revered by fanatical Moslems who tolerate visits by Christians. Here, too, pray Jewish devotees of this matriarch of Israel. The death of Rachel, wife of Jacob, mother of Joseph and Benjamin, near Bethlehem is our first biblical allusion to this holy little town (Gen. 35:19). We are disinclined to accept for Bethlehem Ephrath the location elsewhere proposed by certain scholars. The well-located little walled city appears next in the lyric story of Ruth, the Moabi-

tess, and Boaz, the rich landsman of Bethlehem (Ruth 1-4), forebears of Jesus. It is important in the life of David, son of Jesse the Bethlehemite (I Sam. 16 and II Sam. 23:1-17). Bethlehem was his birthplace and the site of his anointing by the prophet Samuel. From Bethlehem mad King Saul summoned him to play his lyre, or harp, in his palace at Gibeah. Here the hillside grazing land where David, watching his father's sheep, dreamed. To Bethlehem's famous well his devoted warriors came for water to quench the thirst of their sentimental but valiant leader.

In later centuries Bethlehem played a role as fortified stronghold of Rehoboam. This son of Solomon also strengthened Jerusalem, Tekoa, Adullam, Gath, Lachish at the Egyptian border, Aijalon, Hebron, and other pivotal points, where he massed militia and "stores of victuals, and oil, and wine," shields, and spears, making them "very strong." Bethlehem again loomed in the Bible when Micah prophesied in the seventh century B.C.: "Thou, Bethlehem Ephrathah, which art little to be among the thousands of Judah, out of thee shall one come forth unto me that is to be ruler in Israel . . . he shall feed his flock in the strength of Jehovah . . . for now shall he be great unto the ends of the earth. And this man shall be our peace" (5:2-5). The ever-independent inhabitants of Bethlehem offered a rallying point for people disregarding Jeremiah's sixth century advice about going down to Egypt for help against the Chaldeans (Jer. 41:17). It is typical of the home-loving Bethlehemites that more than a hundred returned to their hillside dwellings after the Babylonian Captivity (Ezra 2:21). Bethlehem has always been worth returning to even for us poor travelers who feel the high inspiration of its cross-tipped, starlit Basilica of the Nativity. This structure dominates the town as it first did in the fourth century A.D., when Constantine the Great and his mother Helena erected its earliest portions. Manger Square at Bethlehem has time and again conquered skeptics who arrived with mind bent on stripping faith of its beautiful swaddling bands.

Illustration 158 gives a glimpse of the present appearance of the interior of the Basilica of the Nativity, a medieval traveler

describes it as "a marvelous fair church and a right sumptuous work. . . . I never saw . . . a fairer little church in my life." A picture of its fourth century floor mosaics, accidentally discovered under the modern floor a few years ago during repairs, appears in illus. 66. Its ground plan is a trefoil cross. Its dimly lighted grotto, whose natural rock-walls may well have sheltered the Christmas Child, are dark with the smoke of more than sixteen centuries of worship. Its glorious bells, among which sparrows nest (illus. 185), chime forth every nativity season the "glad tidings of great joy," broadcast to "all the people" of the world.

For costumes of Bethlehemites, as far back possibly to biblical times, and for a properly swaddled Bethlehem infant, see illustrations 72 and 26.

For important archaeological discoveries near Bethlehem, see page 233, Homes.

TEKOA

Tekoa, mentioned as the home of the protesting prophet and dresser of sycamore-figs, is reached by a stony wilderness track which we once followed by donkey from Bethlehem. The way, known only to our brilliant donkeys, it seemed, runs through the land of nomadic agriculturalists or "ta 'amreh." They cultivate their own restricted area and do not move restlessly about like the ancient patriarchal groups and real bedouins of the desert today. The most impressive things we found at Tekoa were a sycamore growing up out of a cave, possibly a rock-hewn tomb, and a polygonal stone Byzantine baptismal font, standing with lonely grandeur amid the stony waste as sole evidence of a once-settled Christian community. A beautifully dramatic perspective up to Bethlehem greeted us as we stiffly jogged up the last hillside track from Tekoa.

EMMAUS

The village of Emmaus to which Jesus walked on the first Easter evening has not been definitely located. It may be Abu Ghosh ("Village of Grapes") a few minutes out from Jerusalem as we motor down a fine macadam road to Lydda. Or it may

be El-Qubeiba, whose Franciscan church is built over Crusader ruins. Albright says it is 'Anwās. More important than the village, however, was the road on which Jesus was overtaken by the bewildered disciples, who told him that they had hoped their crucified leader would have been the redeemer of Israel (Luke 24).

JOPPA

Joppa is today an Arab center, the enemy of adjoining Jewish Tel Aviv. It was a great port in Bible times, within the territory of Dan on the Plain of Sharon (illus. 130). Its importance as a harbor of Palestine has not decreased since the lifetime of Peter, who lodged by the sea with Simon, a tanner (Acts 9:43). Cargoes of Syrian wheat, oil, balm, and oriental luxury goods were pushed out from Joppa to the west. Such a port, too, in Herod's era was Caesarea, a few miles north, whose ruins today across a sandy waste suggest little of its magnificence when Paul arrived here for trial before Felix, the Roman governor (Acts 23).

CITIES OF GALILEE

Time and again in the Gospels it is written of Jesus: "He departed thence to teach and preach in their cities" (Matt. 11:1); or "Jesus went about all the cities and the villages, teaching in their synagogues, and preaching the gospel of the kingdom, and healing all manner of disease" (Matt. 9:35). He was intimately acquainted with most of the settlements we find on maps of New Testament times, in Galilee, especially, and in Judaea. Travel by foot from Nazareth (illus. 159), the happy hill town where he grew up among olive orchards, was pleasant and convenient. Distances were unbelievably short in tiny Palestine.

Cana, among its springs (John 2:1) and groves of pomegranate trees, Jesus passed every time he walked down to Capernaum (illus. 61). Nain, on the slopes of Galilean hills, where he restored a widow's son (Luke 7:11), was ancient even before Issachar inherited it.

Sepphoris in Galilee, four miles north of Nazareth, was capital of Herod Antipas prior to his construction at Tiberias. The

town was very much alive in the time of Jesus, whose family may have taken part in the erection of its hillside theater and aqueduct. Parts of the aqueduct have been found where they carried water to the underground tunnel and open-air reservoir. We find no biblical reference to Sepphoris.

Jezreel was a tiny place listed with fifteen other settlements in Joshua's record of "cities with their villages." It fell to Issachar during the distribution following the conquest. Most of these places were either within sight of or within a few hours' walk from Nazareth.

The lakeside towns of Galilee were all known to Jesus in sordid detail. He knew at Magdala somewhat the same scene we face at Migdal today, a fish-pickling center with slatternly booths on its roof-tops in summer (illus. 98). From one of these homes we saw a young girl emerge attired in flaming red. She halted to chat with our chauffeur about the death that very day of both her parents, a tragedy she felt very lightly.

Capernaum, home of Jesus during his lakeside ministry, had been frequently visited by him with his mother and brothers (John 2:12). It commanded an inspiring sweep of six miles across the blue-green Sea and in the first century was throbbing with commerce and the fishing industry. As the home of Peter it was a natural gathering place for Christ's early disciples and the scene of ministries familiar to us (Matt. 4:13; John 4:46). Today it survives at Tell Hum in massive stone heaped for a sea wall (illus. 163). There is little to suggest its former prosperity except ruins of a synagogue (illus. 61), probably successor of the one built by the centurion grateful to Jesus for the cure of a favorite servant.

There were two lakeside *Bethsaidas*. One, near the copious Heptapegon springs at Tabgha, whose mosaics appear on page 65, is a rewarding fishing ground today (picture 188). The other, Bethsaida Julius, at the northeast end of the Plain of Gennesaret near the mouth of the Jordan, is the traditional birthplace of Andrew, Peter, and Philip. The lonely abandon which characterizes the sites of these vanished cities, and Chorazin, probably two miles north of Capernaum, fills us

with gloom. The soil of the Plain is so rich and well watered, and enjoyed by so few tented bedouin families (illus. 137), that we seek explanation in Christ's prophecy of Luke 10:13.

Caesarea Philippi (Baniyas), on the southern slopes of long Mount Hermon, is a suggested site for Peter's great confession of Christ as the Son of the Living God. Its springs drain into the papyrus swamp of Hulch (see Geography p. 226) and feed the beginnings of the Jordan, even as Peter's confession fed the rivers of Christian faith. One of the finest modern word pictures of "the villages of Caesarea Philippi" in the upper Jordan Valley is from the pen of T. E. Lawrence. See in his *Letters*, pages 70, 71, his rhapsody over Baniyas, concluding with: "Mother will remember this place, mentioned in Matt. 16 and Mark 8. To read of the Transfiguration, probably on a near-by spur of Hermon, is pleasantly appropriate."

A short distance west of Baniyas is one site suggested for Dan. It is a tree-framed mound beside an old road running along the plain between small streams which feed the Jordan north of "the waters of Merom."

Dan (Laish), whose beautiful unexcavated mound framed by fig trees is prominent in illustration 128, was the northernmost town of Christ's home province of Galilee and of Palestine. It was a proverbial boundary on the north, even as Beersheba was on the south (illus. 177). The Hebrews captured it by seizing its local gods, so that they might live in security such as the Sidonians knew, (Judg. 18).

SYCHAR IN SAMARIA

Sychar was the Samaritan village near Jacob's Well, an authentic water source of great antiquity. Jesus there revealed to a woman of the race hated by Jews the truly spiritual nature of worship at its loftiest level (John 4). This conversation has left a greater impression upon the idealism of the world than all the exploits of Ahab at Samaria the Splendid, to which he was brought in his bloody chariot

after death in battle against a Syrian king at Ramoth-gilead.

CITIES OF PAUL

There is much material on the city-to-city movement of the energetic Apostle. Consult map section. From his birthplace at Cilician Tarsus, to Jerusalem for education by Gamaliel, we trace his footprints over mountains and across desert tracks. We follow him up through shaded Galilee and desert stretches to hotheaded Damascus. The eastern gate, shown in illustration 199, was a familiar landmark to Paul; and it was over a wall of this city (illus. 106) that he escaped in a basket after persecution by Jews. Up and down the old coast road leading to golden Antioch on the Orontes, whose silt has covered several occupation levels, Paul walked with his colleagues and established the first groups called "Christians." Time and again he passed "through both Phoenicia and Samaria, declaring the conversion of the Gentiles" (Acts 15:3). In the Roman province of Asia he visited legions of unnamed towns. Some of those mentioned are *Derbe* in Lycaonia, *Iconium*, *Lystra*, Pisidian *Antioch*, and Lycian *Myra*. From the last mentioned he sailed to near-by *Patara* and on to a port town in Rhodes, possibly little *Lindos* with its superb harbor (illus. 145). *Miletus*, mighty-templed *Ephesus* (Acts 19), *Smyrna* on the Asiatic coast, and *Pergamum* in Mysia—all saw his works. History-laden *Troas*, whose mound is visible as one passes through the entrance to the Sea of Marmora, was the springboard from which he leaped from Asia to Europe with a burning gospel in his pocket. *Neapolis* and *Philippi* in Thrace; *Thessalonica* (today Salonika, second largest town in Greece); *Beroea*, whose citizens' noble courtesy and teachability live on today in the compliment paid them in Acts 17:11—all these well-populated cities were on Paul's route to *Athens* and to neighboring *Corinth*. On the Isthmus of Corinth are twin harbors, east and west and one of these, *Cenchreae*, Paul mentioned as the place where he had a haircut, "for he had a vow" (Acts 18:18).

And so, by way of Rhegium, on the Strait of Messina, and the Italian port of *Puteoli* (illus. 219) north of present Naples, Paul came to Rome. He followed the historic Appian Way across the level Campagna paralleling the Aqueduct of Claudius (illus. 202). In Rome, Paul still lives, his sword of faith uplifted in the court of the Basilica of St. Paul's without the Walls, on the traditional site of his burial.

Paul was essentially an Apostle to city dwellers. He took captive for Christ citizens of the chief cities of his age, building them into churches to whom he addressed such doctrinal letters as the epistles to the Thessalonians, the Corinthians, and the Ephesians. The word "city" appears time and again in the Acts record of his work: "The whole city was gathered together to hear the word of God" (Acts 13:44); "the chief men of the city" (Acts 13:50); "the city was divided; and part held . . . with the apostles" (Acts 14:4). His love for cities where he and his company labored is summed up in his invitation to Barnabas, "Let us return now and visit the brethren in every city wherein we proclaimed the word of the Lord, and see how they fare" (Acts 15:36).

CITIES "BETWEEN THE RIVERS"

The writers of Genesis were conscious of the antiquity of cities of Mesopotamia and Persia (now Iraq and Iran). In this fertile country, culture and city dwelling began at extremely early dates in such centers as *Ur*, old home of Abram, *Erech*, *Lagash*, and *Eridu*. *Tepe Gawra* (see illus. 208 for earliest social structures) dates from c.4000 B.C. *Mari*, the Hurrian center in northern Mesopotamia, proves by its recently found library of clay tablets that it had cities built by the influx from the Kurdish Mountains south of the Georgian Caucasus, c.2400-1800 B.C. The Royal Cemetery of *Ur*, where Woolley excavated unsurpassed art treasures (illus. 153), dates from before c.3000 B.C. *Kish*, older than *Ur*, was abandoned because of a westward shift in the Euphrates Valley on whose waters she depended. *Babylon*, "the great city" (illus. 237), is mentioned scores of times in the Bible, in II Kings, Ezra, and Jeremiah. The woes of Hebrews de-

ported to this metropolis on the Euphrates (*Hilla* today) are vivid, and Jews were only one nation subjected by powerful Babylonian rulers. Sargon the Great and Hammurabi (c.1728-1686 B.C., contemporary with Abraham), from whose era have come the 20,000 clay tablets giving vast information about this period, were as avid for conquest as Nebuchadnezzar.

Nineveh (today *Mosul* on the Tigris) is described in Gen. 10:11 as being built by "Nimrod a mighty hunter before Jehovah," who also founded "*Calah*, the great city" (v. 12), below *Nineveh*. The latter is mentioned in II Kings 19 as capital of Sennacherib, arch-enemy of Jerusalem, and of his son, Esar-haddon.

Susa (*Shushan*) with its noted palace appears in the biblical accounts of *Nehe-miah*, *Esther*, and *Daniel*. Its royal house in the kingdom of the Medes was proverbial for its rich carpets and golden accessories under the Achaemenid dynasty, which included Darius, Xerxes, and the Ahasuerus of the *Esther* narrative.

CITIES OF EGYPT

Biblical *On* (*Heliopolis*, now a teeming modern suburb of *Cairo*, with a busy airport) may be the capital of the pharaoh under whom Joseph served as chief chamberlain. We read in Gen. 41:45 that Pharaoh approved his marriage to *Asenath*, daughter of a priest of *On*, and we may not be far wrong in believing that this Delta city, not far from the borders of Palestine, was the place to which kidnapped Joseph was brought by Midianite traders, and to which his aged father Jacob and his hungry brothers came, seeking aid. In the rich, level lands of well-watered Goshen, Joseph's Pharaoh (probably Hyksos) encouraged them to settle. The young monotheist Pharaoh Akhenaton (*Amenhotep IV*, who ruled from 1387 to 1366 B.C.) was profoundly influenced by the priests of *On*. He worshiped the sun, *Aton*, as supreme god, not only of Egypt but of the universe, and honored him by building a new capital at *Amarna*, between *Thebes* and *Memphis*, where he was unrivaled by other gods of Egypt. If we accept the earlier dates for the Exodus, advocated by Garstang and others, it is not impossible

that Moses, founder of the Hebrews' monotheistic religion, was in Egypt about the time of Akhenaton. The Heliopolis Temple was a marvel of Egypt. One of its obelisks, bearing an inscription honoring Re-Harakhti, the falcon-headed sun-god, still stands. Heliopolis is also mentioned in Jer. 43:13 in a characteristic "threat" passage.

It seems strange that fair Akhetaton is not mentioned in the Bible, although many biblical towns are named in the famous Tell-el-Amarna Letters of c.1400 B.C.

Memphis, a capital of upper Egypt, is mentioned by Hosea, prophet of Israel (9:6). The utter absence of its former temples and palaces, save for one alabaster sphinx on an avenue leading to the Temple of Ptah, is evident in illustration 41. Date palms shade slothful Delta cattle and throw their lacy figures over the fallen statue of the oppressor, Ramesses II. Perhaps this statue stood once in front of the Temple of Ptah, honored by Ramesses II after his return from wars in the East. Memphis was mentioned by Ezekiel (30:13) who prophesied that its idols and images were to be tumbled by Jehovah.

The Egyptian port of Alexandria was founded in 332 B.C. by Alexander the Great on a site protected by the island of Pharos. The founder never saw the city after it was built. It became the home of a large Jewish colony speaking Greek, and these Jews demanded translation of their sacred writings into that language. This task was begun under Ptolemy Philadelphus (285-247 B.C.) and finished about 50 B.C. Alexandria was the center of influence exerted by the great Jewish philosopher Philo, of the first century A.D., and by influential Church Fathers such as

Clement of Alexandria and Origen. To early Christian scholars, working in the shadow of the vast library of Alexandria, we owe the editing of early New Testament texts and recovery of original manuscripts.

Daphnae (Tehaphnetes) is mentioned by Jeremiah (2:16), and also by Ezekiel (30:18), who says that God will break the yokes of Egypt and punish this city, "and they shall know that I am Jehovah." This town was in the eastern Delta.

The Thebes of Amenhotep III, (c.1412-1375) is biblical No, whose "breaking up" Ezekiel prophesizes (30:15), along with woes to Memphis.

CIRENE AND SARDIS

Illustration 97 shows North African Cirene, home of Simon who helped carry the cross of Jesus (Luke 23:26). To protect the ruins of Cirene in post-war planning, archaeologists are now in consultation. Jews were influential in Cirene, which had been founded c.632 B.C. People of Cirene are mentioned as being present in Jerusalem at Pentecost (Acts 2:10) and on the occasion of the stoning of Stephen (Acts 6:9). Jewish converts to Christ went from Cirene to preach at Antioch (Acts 11:20). Among these, one Lucius of Cirene is listed with "Barnabas, and Symeon that was called Nigcr" (Acts 13:1).

Sardis, capital of rich Lydia in Asia Minor, was built at the base of Mount Tmolus (illus. 99). It was the home of wealthy King Croesus, who is given credit for "inventing coined money." Rich, voluptuous Sardis (mentioned in Rev. 3:1) was destroyed by earthquake in A.D. 17 and rebuilt with help of imperial funds.

ADDITIONAL BIBLE REFERENCES

"cities for our little ones" (Num. 32:16)

"a great city, as one of the royal cities" (Josh. 10:2)

"except Jehovah keep the city" (Ps.127:1)

"Jews that were in every city" (Esther 8:11)

"put on thy beautiful garments, O Jerusalem" (Isa. 52:1)

"Then began he to upbraid the cities" (Matt. 11:20)

- "Jerusalem shall be called the city of truth" (Zech. 8:3) "I was in the city of Joppa praying" (Acts 11:5)
- "he steadfastly set his face to go to Jerusalem" (Luke 9:51) "out of the holy city" (Rev. 22:19)
- "Be thou over five cities" (Luke 19:19) "harder to be won than a strong city" (Prov. 18:19)
- "whatsoever city ye enter" (Luke 10:8)

BIBLIOGRAPHY

- Albright, William F., *From the Stone Age to Christianity*, The Johns Hopkins Press, Baltimore.
- , *Archaeology and the Religion of Israel*, American Schools of Oriental Research, New Haven.
- , "New Light on History of Western Asia," *Bulletin* No. 77, February, 1940, American Schools of Oriental Research, New Haven.
- American Schools of Oriental Research, *Bulletin*, No. 57, 58, New Haven.
- Anson, Peter F., *A Pilgrim Artist in Palestine*, E. P. Dutton & Company, Inc., New York.
- Caiger, Stanley, *The Bible and the Spade*, Oxford University Press, Oxford.
- Garstang, John, *The Heritage of Solomon*, William & Norgate, Ltd., London.
- Glueck, Nelson, *The Other Side of the Jordan*, American Schools of Oriental Research, New Haven.
- , "Some Ancient Towns in the Plains of Moab," *Bulletin* No. 91, October, 1943, American Schools of Oriental Research.
- McCown, Chester C., *The Ladder of Progress in Palestine*, Harper & Brothers, New York.
- Pfeiffer, Robert H., *An Introduction to the Old Testament*, Harper & Brothers, New York.
- Sanford, Eva M., *The Mediterranean World in Ancient Times*, The Ronald Press Company, New York.
- Semple, Ellen C., *Geography of the Mediterranean Region*, Henry Holt and Company, Inc., New York.
- Steindorff, George, and Seele, Keith C., *When Egypt Ruled the East*, University of Chicago Press, Chicago.
- Turner, Ralph, *The Great Cultural Traditions: The Ancient Cities*, McGraw-Hill Book Company, Inc., New York.
- Wavell, Sir Archibald, *Allenby, a Study in Greatness*, Oxford University Press, Oxford.
- Wright, G. Ernest, "Misunderstood Items in the Exodus-Conquest Cycle," *Bulletin* No. 86, American Schools of Oriental Research, New Haven.

DEFENSE

Jehovah is my rock, and my fortress, and my deliverer . . . My shield, and the horn of my salvation, my high tower.

—II Sam. 22:2, 3

Then saith Jesus unto him, Put up again thy sword into its place: for all they that take the sword shall perish with the sword.

—Matt. 26:52

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INTRODUCTION

The Hebrew people, always poorly equipped with arms and surrounded by aggressive neighbors, early learned to put their trust in Jehovah who was mighty to save them. They felt that it was "better to take refuge in Jehovah than to put confidence in man" (Ps. 118:9). For He had kept them unconsumed while their

cities were ringed with burning olive trees fired by enemies. This attitude developed morale based upon a confidence in powers outside themselves, which accounted for the amazing exploits of Joshua, Deborah, Samson, Saul, Jonathan, David, Abner, and Joab. The man power of Israel was itself the best defense of the nation.

Yet Israel cared enough about safeguarding her heritage and her destiny to

look somewhat to self-defense. Her devices were simple in comparison with what nations 3,000 years later built into their Mareth, Mannerheim, Siegfried, or Maginot lines. Hebrews used crude and scanty materials. They did not have even enough wood to make bows for the army until David worked out an economic relationship with Phoenicia. Nor did they have sufficient metal to make spearpoints for the militia until well into the Hebrew monarchy of the Iron Age. Armor was a luxury reserved for kings, who copied it from Philistines or captured it as booty. The militia of Saul, who was troubled with wars throughout his reign, and the mighty men of David, who fought the earlier campaigns which led to his uniting Israel (c.1013-973 B.C.) from Hebron to Damascus and as far west as Tyre, knew what it was to have Jehovah's help. Aided by Him, they leaped over walls (Ps. 18), they developed arm strength sufficient to "bend a bow of brass," and to carry "a shield of salvation." Yet they were able to sing, "Thy gentleness hath made me great." They absorbed some of the spirit of David, who, while copying the tactics of the Philistines for the reorganization of his army, yet kept a spiritual and artistic outlook upon life.

It is not too discouraging to find the Old Testament full of scenes of warfare and military equipment. For these help us to realize the price Israel was willing to pay to secure foothold in an occupied country where she could preserve and develop the monotheism which God had entrusted to her. From the contests with Canaanites, Jebusites, Philistines, Hittites, Amorites, Phoenicians, Egyptians, Syrians, Babylonians, Assyrians, and Romans, Israel's mood, as we see it throughout the pages of Scripture, was "Fear not ye, O Israel, neither be dismayed. Jehovah will be with thee." A divinely sustained sense of being equipped with "chariots of God, and the horsemen thereof" gave early Hebrews the physical courage to pursue a spiritual destiny. Jews were a current in the stream of monotheism which for thirty centuries has lived within the narrow borders of little Palestine. Judaism, Christianity, and Islam, all exalt God as no other religions.

FORTIFICATIONS

BEFORE ISRAEL CAME TO PALESTINE

SOME CANAANITE DEFENSES

Walled cities, on mounds which seemed to reach to heaven, confronted the ill-equipped Israelites when they crossed the Jordan to seize possessions in Canaan. Canaanites, famous for their masonry construction, had by 2000 B.C. erected massive defenses, now excavated on such sites as Ta'anach, Jericho, Shechem, and Gezer. At Gezer the governor's palace has been found. Some of the Canaanite cities did not fall to the Hebrews until the time of Solomon (973-933 B.C.). Others never yielded. And even before the Canaanites were constructing Cyclopean walls of polygonal blocks to ring their high-point cities, their Amorite predecessors, who swayed the land from 2500 B.C. or earlier and may have merged with Hittites to form the Canaanites, had a series of forts stretching from the Mediterranean to the Jordan, across the Plain of Esdraelon, and south to Hebron, Gezer, and Lachish. The report of Moses' spies was literally true: they did find cities "fortified, and very great."

Archaeologists have uncovered surprising evidences of these fortifications—walls, towers, gates, and citadels. The old Amorite fort unearthed at Megiddo overlooking Esdraelon covered twenty acres. It was built of sun-dried brick alternating with layers of undressed field stone, like a late wall at Jericho. So when we read in Scripture how Israel struggled to attain the strongholds of Amorites, Hittites, Perizzites (metal-workers among the Hittites), and Jebusites, holding the scarp of what became Jerusalem after David seized it, we realize how formidable was their application of fire and sword. The Israelites, who first saw the fortress-palace of the Canaanites, with its pillared "judgment hall" and great protective tower adjacent at Shechem, were amazed that they had ever captured such a site. Hittite architects are given credit for such work, for Hittites were prominent in Palestine from the Middle Bronze Age on.

In the excavations recently made at Ras Shamra in northern Syria, a stable with

mangers, which probably belonged to the King of Ugarit in 1400 B.C., has been found. In it was a cuneiform tablet (described in *Bulletin No. 77* of the American Schools of Oriental Research) which listed the arms kept in the royal Ugaritic arsenal. This important port was destroyed by the "Sea Peoples" about the beginning of the twelfth century B.C. The royal palace had been protected by a square tower about 70 ft. wide, with massive revetments. We get an idea of the elegance of Canaanite weapons which once guarded the king from Albright's description of "a priceless battle-axe, dating from the beginning of the fourteenth century B.C., of copper damascened with gold and elaborately decorated with a boar and two lions' heads in relief and inlaid floral designs in gold. The axe-head is steel, of poor quality, to be sure, but much harder than iron or bronze." Such a find brought great satisfaction to the director of the Ras Shamra Excavation, M. C. F. A. Schaeffer.

Traders of Ras Shamra maintained a lively commerce in horses with Syria and Egypt, but Solomon succeeded in wresting this trade from them for a time. Ugaritic merchants in this north Syrian center transshipped precious objects from the Red Sea section to upper Syria and Mesopotamia and exchanged cargoes of arms and utensils of bronze, thus getting capital for their war-steed market.

Beth-el, occupied almost continuously since 2000 B.C. or earlier, had well-constructed city walls in the Late Bronze Age II. Archaeologists who studied these walls and the ample pottery found at their base dated at about 1300 B.C. the fall of the Canaanite city to Israel. This is the first accurate evidence which has yielded a date for Hebrew occupation of a Canaanite city mentioned in the Bible. For interesting facts concerning city and house walls at Jericho, consult *Bulletin No. 56* of the American Schools of Oriental Research, which has pictures of Beth-el's Bronze Age masonry. Beth-el seems to have fallen by a terrific burning. Evidences in the form of burned brick, ash-filled earth, and charred debris have led Millar Burrows to conclude that the attacking Hebrews did a very thorough job here, even as they did at Jericho in the same period.

Of the firing of Beth-el by the Israelites at their conquest, Albright says: "We have never seen indications of a more destructive conflagration in any Palestinian excavation. The break between this and the following stratum is also more complete than in any other except between Iron II and Hellenistic . . . masonry, building-plans, pottery, and culture." (*Bulletin No. 56*, American Schools of Oriental Research). The fine quality of early masonry, stone pavements, and drains is a record of Canaanite building skill, vastly superior to that of the Hebrews who succeeded them. We begin to understand why Solomon summoned Phoenician masons and architects to construct his Temple. Beth-el gives the cue.

Portions of Jericho's famous walls were built by Amorites or Canaanites as revetment protecting the little city mound near the priceless spring of the oasis on the Plain (illus. 122). These walls speak the material prosperity of the city before the Egyptian conquest. Palace storage vaults, excavated in recent years, revealed foods accumulated there when the town was burned by the Hyksos. The wall history of Jericho has been so well described in the works of John Garstang, Albright, and Sir Charles Marston that we need not here go into detail. We have had the satisfaction of tramping over the exciting mound whose capture by Joshua is described in the sixth chapter of the book bearing the leader's name. The story is to a large extent verified by what archaeologists have unearthed: the rampart, with its broad fosse 11 ft. deep through rocky sub-soil, and scarabs, sherds, and weapons. As we have indicated in our *Footprints in Palestine*, Garstang, digging for the University of Liverpool, found walled cities from the four chief phases of the Bronze Age, dating from earlier than 2000 B.C. through the Late Bronze Age. Noting changes in the character of pottery fragments, he interpreted the date and some of the circumstances by which the defenses were altered in succeeding periods. He penetrated the pre-Bronze-Age shadowy era when there were no potsherds to help him read the past but only flints and carved bone fragments. We ourselves saw earthen jars still containing wheat, as when Jericho

fell to Joshua. It must have been encouraging to the Hebrews to gain such a stronghold as stone-walled Jericho so soon after crossing the Jordan. The timely earthquake, against which recurrent catastrophe the builders of Jericho seem to have provided a sort of shock-proof clay-embedded construction, was as helpful as the prowess of the infantry and the vibrating trumpets of Joshua. Ringed with double walls of sun-baked brick and some polygonal blocks, dignified with a brick bastion system and brick houses whose walls abutted on the city walls, the proud little oasis city of palms (illus. 122) was a prize which the home-seeking Hebrews must have hated to destroy. But Jehovah had commanded them to wreck utterly the strongholds of their foe.

For Hazor, see page 160.

"MARK YE WELL HER BULWARKS"

Even while the Hebrews were still nomadic wanderers coming into Canaan from Egypt, they looked with terror and envy at the strong cities of the Canaanites. Jehovah gave them encouragement in the years when Israel had no walled villages but only the strength from men girded "with the weapons of war." God's strategy was clear: they were to approach a city and offer peace; if there was resistance, they were to besiege until they had utterly destroyed every citizen with the edge of the sword. Only fruit trees were they to preserve as a future food supply. Ordinary trees were to be hewn for bulwarks of war.

As soon as seminomadic habits took hold, Israel established fences about her villages in lowlands on the edge of fields. Similarly, nomads of Transjordan today, till in summer and retire to a walled town on a hill for winter. The people of Ramallah live in a central group of houses, from which radiate strips of cultivated gardens.

In times of security, people paid less attention to town walls. But when a Senacherib was approaching, with his eye on "forty-six fenced villages" at a sweep, fortifications were thrown up and mounds added to the mud-brick or stone walls. The feverish haste of Jerusalem's citizens at the approach of Babylonian or Assyrian

armed might, the filling in of neglected breaches, and the cry "To the Walls!" are vividly depicted in Scripture.

DEBORAH'S DEFENSES

From the Song of Deborah, one of the earliest written portions of the Bible, we learn of the weapons by which Israel in the period of the judges defended herself against a Canaanite king, Jabin. They seem to have been chiefly "the edge of the sword" and human courage. The forces of the woman judge, Deborah, and Barak had the advantage of higher ground for the attack. They swept down from Mount Tabor into the level Plain of Esdraelon illus. 223, whose topography has ever made it the battleground of the centuries. That plain was advantageous for the chariots of the Canaanites, but the mere swords of Israel, inspired by Jehovah's presence, prevailed. The hour was a tense one in the destiny of Deborah's people. "War was in the gates," and there was not a shield or a spear among 40,000 in Israel. This statement has been archaeologically proven, for not until David's era did metal become at all plentiful. Archers are mentioned in verse 11 of this great poem of Judg. 5. There is an excellent example of how domestic tools were also used as weapons. Hammer and tent pin, intended for pitching peaceful goat's hair on plains, were used by Jael to pierce the forehead of the Canaanite captain, Sisera, who had taken refuge in her tent asking for water after the battle. Even the spoils of the contest are mentioned: "two damsels to every man . . . spoil of dyed garments . . . embroidered on both sides."

Other weapons of the picturesque period of the judges were the sword, the terrifying torch and pitcher of Gideon, and the jawbone of an ass, with which Samson claimed a thousand Philistine foes.

FORTRESSES UNDER THE HEBREW MONARCHY

FORT GIBEAH OF SAUL

The battle lore of Judg. 20 tells how Benjamites by the thousand, all of whom could sling stones "at a hair's breadth" and draw swords with smiting might,

brought all their tactics of weapon and fire against Gibeah. Scripture is confirmed by archaeological finds at this stronghold, which revealed four fortresses of various periods, the earliest dating from c.1200 B.C. Albright believes that the Cyclopcan masonry of polygonal blocks burned between 1150 and 1100 B.C. (dates attested by pottery fragments found on the site) with cypress and pine, whose ashes remain to our day, are the Philistine defense described in Judg. 20. Gibeah is Tell el-Ful and under that name can be studied in available reports of excavating groups of scholars. Its second fortress seems to be the stronghold of Saul, four miles north of Jerusalem, in view of that city which Saul's successors made their capital. Saul's Fortress, erected between 1020 and 1000 B.C., well illustrates the construction of this period, characterized by what Albright calls "casemated walls, and separately bonded corner towers." This only extant structure of Saul was about 170 by 155 ft. in size. It had two stories with a strong, stone stairway. Interesting windows lighted the lower story. Gibeah is also associated with David and Samuel the prophet. Kings Asa and Uzziah partially rebuilt the Gibeah fortress in later centuries.

Egyptian art records two of the fine towers which were the prize of military architects at Gibeah. Yet Garstang says that the principal building of Gibeah from Saul's era, with massive stone construction and deep walls, was like a dungeon rather than a royal residence, in comparison with the Canaanite masonry with which Solomon later graced Jerusalem. Albright, who excavated Gibeah (see *Annual*, 1924, American Schools of Oriental Research), has an interesting note on Saul's citadel in "From the Stone Age to Christianity," equally low estimate of the building skill of the "rustic chieftain," Saul the Benjamite.

CITY CHAINS AS FORTRESSES

In addition to strong walls of individual towns, Palestine had bastion-cities that were complete fortresses, linked in a strong system of defense. Typical of these was *Beth-shan*, key to the Jordan Valley at the eastern end of the Valley of Jezreel—the

extension of the "battleground of the ages" on Esdraelon Plain. Beth-shan (Tell el-Hosn, meaning Mound of the Fortress) yielded to the spade of such archaeologists as Clarence Fisher and Alan Rowe, not only the famous complex of Egyptian temples dating from the reigns of Amenhotep III (1412-1375 B.C.), Scti I (1318-1299 B.C.), and Ramesses II (1299-1232 B.C.) but also light on fortress construction during critical periods of early Palestinian history. In the level of City 7, era of Amenhotep III, foundations of the commandant's residence have come to light. These indicate a spacious kitchen whose oven was designed to take advantage of the plentiful foods grown near the fort; a tower gate; and a lavatory. A tremendous silo large enough to store 9,270 gallons of grain was accessible from the kitchen. The 13th century migdol or fort-tower whose extensive foundations were found, was designed as an emergency refuge to be used for a last stand after the walls had been breached. This rectangular migdol with its flanking towers was typical of Canaanite defenses, and resembles a Hittite structure at the entrance of the Carchemish citadel. It had five rooms and a staircase by which the troops could mount from the interior to the outer south wall. The Beth-shan migdol was erected at the time when Hittites, as we learn from Tell-el-Amarna letters, were intriguing against the Egyptians; and when Mitanni chiefs and bands of Khabiru (Hebrew?) nomadic Semites were coming into Palestine.

At Beth-shan there are also traces of the strong citadel of Ramesses II with its two temples rivaling military matters in interest. But most interesting to Bible students is a floor, laid about 1000 B.C., in the epoch when David took Beth-shan from the Philistines and partly demolished the "house of the Ashtaroth" and the Temple of Dagon. In c.1020 B.C., Philistines at Beth-shan had defeated Israel and had put the armor of Saul in the house of their Ashtaroth (I Sam. 31:10) and had fastened his royal head to the walls of the house of Dagon (I Chron. 10:10). The kindly rescue of the bodies of Saul and his sons by the men of Jabesh from over Jordan, was due to the fact that the Hebrew king had once rescued their

town from an encroaching Ammonite king.

Another fortress-stronghold was Megiddo, controlling not only the Plain of Esdraelon but the precious Carmel Pass south to Egypt (see p. 227). Its name in Hebrew means "place of troops." The Bible refers to Megiddo in Josh. 12:21, Judg. 5:19, II Kings 9:27, and II Kings 23:29. For details on Megiddo, see Solomon's Chariot Cities, page 188, and Water Supply, page 429. Illustration 21 shows a stone manger from Megiddo.

A third illustration of a bastion-city is Lachish, at the border between Egypt and Palestine. This glowering mound dominating ever-fertile grain lands has much to offer Bible students in illustration of the struggle made by ancient peoples to dominate history from the Chalcolithic and Bronze ages on. Backed by Sir Robert Mond, Sir Charles Marston, and Sir Henry Wellcome, an expedition, ably led by J. L. Starkey opened up the huge Tell ed-Duweir. Bronze Age temples and, in the fosse, a series of temples described under Worship, page 455, came to light. A unique water supply, a Persian palace residency, and a Solomonic well were revealed. The now-famous guardroom (illus. 107) outside the city gate, yielded the Lachish Letters, written in ink on bits of broken pottery in 589 B.C. These Letters, military correspondence in perfect Hebrew, enable us to know what the language of Jerusalem and of Jeremiah were like when Nebuchadnezzar was invading Palestine.

Eighteen of the Lachish Letters are filed "carbon copies" of lost papyrus correspondence between a subordinate commander and the military governor stationed at Lachish (illus. 107). How easily these bits—five from one broken vase, which can be fitted together—could have been overlooked in the excavation of 19 acres with debris 62 ft. deep. One pottery letter reads: "May God let my lord hear good tidings today. I have carried out all the instructions you sent me and have written on the papyrus roll all that you wrote to me. As regards the inn, there is nobody there. And Shemaiah has taken Semacniah and brought him up here to the city, and I will write and find out where he is." On the reverse side, the

ostrakon reads: "Because if in his survey tour he had inspected, he would have known that we are watching the signal stations of Lachish, according to all the signals that you are giving, because we cannot see the signals of Azekah." One letter refers to a prophet, in the time of Jeremiah.

An inscription on a red bowl found at Lachish carries a message in Hebrew (illus. 70). And what looks like Hebrew A B C's scratched by a Hebrew schoolboy of c.600 B.C. on a palace step, offers, together with the bowl inscription, some of the most important epigraphic material since the Amarna Letters. The Lachish written matter is a link between the Sinai script of c.1500 B.C., discovered by Petrie, and the Phoenician alphabetic writing of c.1200 B.C., from which the Greek and our own alphabets were derived. The Pentateuch could have existed in written form earlier than we for a long time thought.

Illustration 107 shows Hebrew masonry near the guardroom where the Lachish letters were found.

Great interest is attached to the deep well into which brands of burning wood were tossed at the time of siege. A few of the charred fragments of this wood are on our study desk. The well and a deep tunnel shaft, 84 ft. across and about 100 ft. deep, indicate skill of the ancients in rock-hewn engineering works. Lachish has proved one of the three greatest digs in Palestine. Its biblical history includes its capture by Joshua (10:32), its fortification by Rehoboam (c.932 B.C.), its destruction by Babylonians in 597 B.C. (II Kings 24:1-17), and its devastation in late summer or autumn during the olive harvest of 588 B.C. by the army of Nebuchadnezzar advancing on Jerusalem.

Mesopotamian Tepe Gawra is an example of a strong city of the Tigris Valley, near ancient Nineveh. A circular wall still standing to a considerable height encloses several rooms built during the Chalcolithic Age (probably between c.4000 and c.3000 B.C.). This area served as both fortress and temple. It was a place of refuge like the Tower of Babel and other towers of Mesopotamia, precursors of medieval refuge towers in Italian Bologna and Siena. The Tepe Gawra prehistoric structure is unique

in the military history of the entire Middle East, according to reports of the American Schools of Oriental Research and material exhibited in the University of Pennsylvania Museum. For social structures of Tepe Gawra, see illustration 208.

FORTRESSES IN IRON AGE TRANSJORDAN

Nelson Glueck, in *The Other Side of the Jordan*, describes remains of an elaborate gateway at the northeast angle of a city wall in the great Iron Age fortress of Khirbet Remeil, overlooking a dry river bed. Inside this gate of a vast walled compound, in front of a blockhouse, is a "broad place." Glueck imagines that judges sat there to hear local quarrels, as in Judah across the Jordan. Such fortresses guarded not only rich caravans bringing wealth to the rulers of Israel and the north country. They defended the approach to Solomon's copper-mining and -smelting centers in the 'Arabah, especially at Ezion-geber at the head of the Gulf of 'Aqabah (illus. 34).

Near the entrance to Petra, cut in rose-red cliffs of southern Transjordan, Glueck discovered a mighty Edomite fortress, biblical Teiman, called today the village of Tawilan. This guarded the great camel trains of the trading Edomites and their high plateau grain fields at the foot of a towering rock-hill, Umm el-Biyarah. The pottery found in profusion on this site dated the Edomite occupation of the mountain stronghold near 'Ain Musa ("spring of Moses") from the tenth to the sixth century B.C. Fortress Umm el-Biyarah was the largest Edomite center in the Petra area. It was only one of a chain of key fortresses protecting busy caravan routes from Arabia and the Red Sea country, and defending eastern Palestine against invading Israelites who sought passage through the rich highlands. Another one of the Edomite fortresses studied by Glueck is Iron Age Khirbet Tawil Ifreii, near the southeast frontier. It is built of roughly cut basalt blocks.

When we see such strongholds here and know that Moab was equally well defended, we can understand why the wandering Hebrews coming from Egypt

had to detour (see Judg. 11:22 and Josh. 12:3). Sihon, king of the Amorites, controlled what Glueck calls "a corridor consisting of the entire east side of the Jordan, extending from the east shore of the south half of the Dead Sea to the east side of the south end of the Lake of Galilee." So when the Israelites conquered Sihon of Heshbon, great was their prestige.

The Iron Age fortresses of Transjordan look tremendously impressive when viewed from the air. They nestle among the highland crags or glower on hilltops, not unlike the Moorish towers of Spain.

CITY WALLS, GATES, AND TOWERS

Every walled town in every age has a romantic aspect. From the walls of Yugoslav Dubrovnik, with its plump Minceta Tower, we have looked into the picturesque attics of thrifty people. The forty towers of French Carcassonne have been restored to their medieval charm by Violet-le-duc. The restoration of Crusader Rhodes under Italian archaeologists was a masterpiece of imaginative and historic reconstruction. The two-mile circuit of ancient walls in British Chester and the vestiges of York's early ramparts of clay, wood, and stone, with a western fortress-tower associated with the first Christian emperor in this military capital of Roman Britain, all tie in with historic efforts at defense.

Yet the walled cities of Bible lands have a unique charm because, in addition to their architectural message, they witness so much that has become our religious heritage. "Let us build up the wall . . . that we be no more a reproach" (Neh. 2:17).

JERUSALEM'S HISTORIC WALLS

Walk about Zion, and go round about her;
Number the towers thereof;
Mark ye well her bulwarks;
Consider her palaces.

—Ps. 48:12, 13

To follow almost forty centuries of history inherent in Jerusalem's man-made walls and natural scarp on the main watershed of Palestine on her plateau above three valleys would involve many volumes

of discussion and a lifetime of investigation. Some of the mysteries of numerous rebuildings after sieges still defy the most brilliant archaeologists, who do not have the freedom of excavation enjoyed at Athens and Corinth by the American School of Classical Studies. For in Jerusalem, citizens and religious groups living on top of layers of rich historic evidence are unwilling to vacate even to advance world knowledge. Yet excavators have looked into the face of certain Jebusite and Davidic masonry on the slope beneath the present east wall, whose continuity of line is more consistent through all Jerusalem history than that of the north, west, and south walls. The topography of the plateau facing the Mount of Olives is the determining factor.

Even in their present sixteenth-century form (illus. 166), the walls with their rose-ivory tones, flushed at sunrise to golden beauty, give us something of the feeling inspired in ancient worshipers when they ascended to Zion. These devout Hebrews would have lost the cunning of their right hands rather than to have forgotten Jerusalem. They preferred her above their "chief joy" (Ps. 137). To stand within the strong gates of Jerusalem, to huddle within her ramparts, and to give thanks to Jehovah for "the thrones of the house of David" brought to the lips of the devout, "Peace be within thy walls, and prosperity within thy palaces" (Ps. 122). Jesus had this same emotion when he beheld the walls of Jerusalem; yet his patriotism was smothered under resentment of the heartless treatment of the prophets and of himself as a messenger of God. Beholding the phlegmatic silence of those who should have welcomed him, Jesus declared what has since come literally true under the spade of the archaeologist, "The stones will cry out" (Luke 19:40). Looking at her imposing walls as he stood on the Mount of Olives, he visualized a time when citizens who had been offered "the things which belong to peace" would see enemies "cast up a bank [palisade]" and compass her on every side to her utter defeat. These words became truth when the forces of Titus pounded Jerusalem in A.D. 70.

A GLANCE AT THEIR HISTORY

A brief survey of the history of Jerusalem's walls shows us the high, rocky scarp at the southeast, glowering over the Kidron and the Hinnom valley (illus. 101). Jebusites were in possession of the summit long before David sent his men up the watercourse (c.1006 B.C.) and "took the stronghold" which became Zion and the "City of David." Here at the southern end of the plateau the land seems about to slide into the valleys. The small City of David was immediately south of what became Solomon's Temple site. In David's day this spot was still a threshing-floor busy with Jebusite harvests of Ornan and other local farmers. Although David was too busy with wars to beautify his new capital or to begin its Temple, he did build a portion of wall "from Millo [meaning 'filling in'] and inward." The hastily constructed barricade included a Davidic tower of massive proportions, built, as Duncan says, in Syro-Egyptian style, with walls from 16 to 8 ft. thick. For an illuminating yet brief description and for pictures of the Davidic construction work, consult Volume II of Duncan's *Digging up Biblical History* (pp. 189ff.).

The extended wall of the "City of Solomon," known as the "first wall," was not only repaired where David had broken it down at the time of his capture of the height, but it was built north to give platform for the Temple, palaces, and other public structures of the son of David. Successive Hebrew kings extending the walls on the north and the south were Uzziah (780-740 B.C.), Jotham (740-735 B.C.), Hezekiah (720-692 B.C.), and Manasseh (692-638 B.C.). With Nebuchadnezzar in the siege of Jerusalem, 588-586 B.C., came mutilation. The so-called "second wall" was probably built as early as King Amaziah's reign (c.798-780 B.C.), and the much-discussed "third wall," dates from Herod Agrippa's projects of A.D. 40, which enclosed the largest area the city ever realized. The north line of Jerusalem's walls, with reference to the present Church of the Holy Sepulchre and Gordon's Calvary, has much yet to reveal about the location of Golgotha, to which many

scholars have given devoted but thus far futile investigation. The second wall may have gone in a curve, starting near the present Tower of David and leaving the low hill of Calvary outside and close by.

Nehemiah describes his secret night survey of the Jerusalem walls upon his return from Babylonian Captivity in c.444 B.C. and the repairs made by the citizens. The walls had for some sixty years lain breached and were tumbled heaps in many sectors. Even such scholars as Millar Burrows have failed to come to satisfying conclusions about the location of Nehemiah's gates and wall portions with reference to present city gates. But the precious second, third, and fourth chapters of the Chronicler, who used Nehemiah's survey data, make vivid the six groups of citizens who repaired the six gates first of all; the guilds and craftsmen who rebuilt their allotted portions of the wall, with a sword in one hand to fend off sudden enemy attack, and a mason's trowel in the other; the taunts of Sanballat and the Samaritans who tried to discourage work; and the weight of the accumulated rubbish which was almost too heavy for the burden-bearers. The Chronicler highlights the glad co-operation between builders and men who took their turn holding the spears "from the rising of the morning until the stars appeared"; the refusal of the workers to remove their clothes even for a night's rest until their reconstruction job was finished; and the collaboration between priest-builders, goldsmith-masons, nobles who put their necks to the task, perfumers, and servants. Toilers finished the repair apparently in a few weeks, because "the people had a mind to work" and felt that God was fighting with them in this opportunity granted by clement Cyrus the Persian, ruler of Babylon.

We, like Nehemiah, have mounted tiny donkeys and ridden slowly around the present walls of Jerusalem, trying to imagine the locations of the Valley Gate, the Dung Gate, the Fountain Gate, the Water Gate, the Sheep Gate, the Fish Gate, and the Yeshanah Gate. We felt that the present Dung Gate, among whose refuse we saw pious-curved Jewish men and women picking rags, is just north of the old Dung Gate at the south of the

"City of David," overlooking Hinnom Valley. Nehemiah says that this gate was repaired in his day by "Malchijah the son of Rechab, the ruler of the district of Mizpah," who "built it, and set up the doors thereof, the bolts thereof, and the bars" (3:14). And when we came to what we believe to have been the King's Garden, near "the steps that go down from the city of David into the Kidron Valley," and the Pool of Siloam, we seemed almost to hear the hammers of the fifth century before Christ. When we came to the great sealed Golden Gate (illus. 166), in the east wall, looking directly across to Gethsemane and the Mount of Olives, we felt as if we were near another exit known to Nehemiah. But Burrows believes there were in this prophet's time no gates between the Fountain Gate and the Water Gate. As we walked through Damascus Gate afoot, we sensed that the old Fish Gate, to which mongers brought hauls from Galilee and Phoenicia, was at this north side of Jerusalem's walls. The Sheep Gate probably was the entrance on the north side of the Temple, by which animals were brought for the sacrifice. The Old Gate, at the northwest of Solomon's wall, we felt to be on the site of the present crowded Jaffa Gate (illus. 103). The Broad Wall, near the market booths south of Jaffa Gate, still looks broad.

The walls of Jerusalem are the priceless heritage of all the world and should never be allowed to crumble under another war. They should be kept in repair as a museum piece, even as dirty little David Street, or Suwcikat Allun, alive with vegetable stalls and balking donkeys, should forever mark the probable line of Solomon's north wall. The street descends by steps to the bed of the Tyropoeon Valley, whose rift would have made a natural boundary for the city and would have left the Calvary of the later Holy Sepulchre site outside the city walls.

The surrounding country supplied materials for the Jerusalem walls. Limestone came from quarries and grottoes near the present Damascus Gate, for example. Many of the oft-reused blocks were once gleaming-white limestone, streaked with pink which became rose when exposed to many years of sirocco wind and heavy win-

ter rain. Such white-to-pink limestone is today built into new homes of thrifty Arabs just outside the city wall or on Bethlehem Road. The deep ivory of Jerusalem walls bears out in reality the inspiring words of Bernard of Cluny in "Jerusalem the Golden." On our many visits to the city, we have fallen victim to the charm of their "radiancy of glory." From the crest of the Mount of Olives we have watched the light of a fresh sunrise draw the misty veils of night up from the valleys to let the gated walls stand forth in majesty (illus. 1).

It makes an interesting Bible-study project to compare a map of modern walled Jerusalem (illus. 166) with the wall-building chapters of Nehemiah. This exercise makes vivid the ramparts of the centuries in the Holy City.

Even eyes untrained to evaluate the quality of stone work cannot fail to observe the wide variety of masonry in Jerusalem's walls. They have a profile all their own, when viewed down their length. Crude, unfinished stones protrude among beautifully dressed blocks still showing evidence of the finishing tools. Some are flat-faced; some look as if they had fallen down and been reset time and again. Others are as serene as the day their mason proudly lifted them into place. Quite a number bear mason's marks of diagonal toolings, triangles, or six-pointed stars, like many Crusader churches of Palestine, in emulation of ancient "signatures." The stone work in some places was bossed to help it withstand battering-rams. Weather-worn here, sunlit there, crenelated all along, running back and forth in zigzag angles like shock troops sallying forth and retreating, the walls of Jerusalem have a way of making us who walk beneath them feel very small. At their base are countless Moslem graves, and countless Jewish graves face these on the opposite slope of the Kidron.

By looking into the face of the wall masonry of Jerusalem or any other biblical walled city, we can date the period of its construction. Even an Arab caretaker points out with pride, "Solomon, he built this." The manner in which stones were dressed, the marks of finishing tools, and the proportion of unwrought and finely wrought

parts tell the story. Whether stones have margins or picked centers and whether they are flat-faced with diagonal tooling or are "comb-picked" are significant points. The texture of the stones and their position with reference to gates help solve the mystery of conquest and reconstruction. If a city wall was repaired soon after its downfall, the same stones were employed; just as in the modern Athenian Acropolis column repairs, drum was set back upon drum. If too long a period had elapsed, fresh stone had to be brought from quarries, for citizens would have carted away the debris to build homes. Often marble-palace fragments turn up in squalid village huts today, as at Jerash.

The southeast corner of Jerusalem's wall is of great historic importance. It rises about 72 ft. above the surface, with 80 ft. hidden from sight under rubble of the centuries. The third huge stone in the fifth course on the south is solemnly impressive. It is pointed out by natives as the one to which Jesus referred when he said, quoting the 118th Psalm,

The stone which the builders rejected
Is become the head of the corner.

The modern walls are two and one-half miles in circumference, shaped in an irregular quadrangle. The eleven gates, several of which appear in illus. 102, 103, 166 are:

Damascus Gate called by Arabs, Bab el-'Amûd, or Gate of the Column.

Herod's Gate called by Arabs, Bab es-Zahiré, or Gate of the Flowers.

St. Stephen's Gate (from associations with the stoning of Stephen) known to Arabs as Bab el-Asbât, or Gate of the Tribes.

The Golden Gate, built by Empress Eudoxia in the fifth century used by Crusaders for Palm Sunday processions, and walled up by Turks.

The Dung Gate known to Arabs as Bab el-Mughâribeh, or Gate of the Moors.

Zion Gate, or Bab en-Neby, so called because it is near the Mosque of David and the traditional scene of the Last Supper.

The Jaffa Gate, or Bab el-Khalil, leading to Hebron, home of Abraham, Friend of God, and to Jaffa. It is the busiest of all Jerusalem's gates and is located in the west wall.

The New Gate, known among Arabs as Bab es-Sultan Abdul Hamid.

About forty towers, including some of the projecting gates, ornament the beautifully crenelated walls, which date from Suleiman the Magnificent in the sixteenth century.

The Citadel, adjoining Jaffa Gate, is one of the most interesting portions of Jerusalem's defense. Parts of its towers go back to the Phasael (Tower of David), Hippicus, and Mariamne Towers of Herod. The crenelated Tower of David is picturesque (illus. 103), even if not of Davidic origin. It is of the Mameluke era (fourteenth to sixteenth century A.D.), built on ruins of Crusader and earlier construction. Recent excavation has brought to light cooking pots used by workmen of the first century A.D. and many coins, as well as pottery indicating occupation of this site from the time of the Hebrew monarchy to the Exile.

BROAD PLACES AND CITY GATES

A great many details about the walls, gates, and towers of Israel are given in the Bible. The royal palaces of the Hebrew kings and the headquarters of influential prophets generally overlooked the city gates, as Saul found when he was seeking Samuel. David transacted his people's business standing by the side of the city gate and heard their complaints, even as the mayor of little Bethlehem today listens to the troubles of countrymen from the near-by farms in his headquarters facing Manger Square at the city's entrance.

Broad places were formed by two overlapping sections of the town walls. Sometimes this space was 30 ft. square, near the guardroom. There the king sat, as Samuel tells of Saul's "sitting upon his seat by the wall," on his throne-like chair, giving the daily "broadcast" to his subjects. All state business was transacted there, as in the Roman basilicas of later date. Gossiping, revolts, bargaining, and prophecies went on in the broad place within the gate. When in any age political conditions became so bad that "the elders ceased from the gate," crisis was imminent (Lam. 5:14).

A gate dating from 1800 B.C. has been

excavated at Megiddo, overlooking the Plain of Esdraelon. It was so built with reference to the wall that those entering had to turn at right angles. The same is true at Jaffa Gate in Jerusalem today.

One of the famous gate stories of the Bible dates from the period of the judges and tells how the strong man Samson plucked up the gates of Gaza—posts, bar and all—and carried them as far as "the mountain that is before Hebron." Archaeologists have found near Gaza, at Tell-el-'Ajjul, ruins of fortifications with a gate, a moat 20 ft. wide, and a tunnel 500 ft. long leading into the Philistine Plain.

TOWERS

Jewish builders had a predilection for towers, several ancient specimens of which are in Jerusalem. As we picked our way by donkey one day below the East Wall, we came upon several courses of masonry in what had been a tower some 24 ft. in diameter and 4 ft. thick. It faced the modern village of Silwan (Siloam) and we wondered whether this, or one like it, had suggested the picturesque allusion of Jesus recorded by Luke (13:4): "those eighteen, upon whom the tower in Siloam fell, and killed them, think ye that they were offenders above all the men that dwell in Jerusalem? . . . I tell you, nay: but, except ye repent, ye shall likewise also perish." Jesus must often have studied the towers of his city and thus pondered the exacting nature of discipleship: "which of you, desiring to build a tower, doth not first sit down and count the cost, whether he have wherewith to complete it?" (Luke 14:28) The Tower of the Furnaces referred to by Nehemiah may have been adjacent to the valley where burnings took place; and the great "tower that standeth out" was located by Warren, south of the old Temple Area.

We see the Herodian Tower on our way east from Stephen's Gate through the Moslem Cemetery with its flat-topped graves. It stands only 30 ft. above ground, but there are 110 ft. below ground, surrounded with all sorts of unexplored treasure and trash of Jerusalem's many wars, which may some time yield their secrets to eager archaeologists. This tower is between

Stephen's and the Golden gates. The Tower of Antonia, where Paul was bound after his arrest and from whose steps he made his famous defense (Acts 21), is at the northwest angle of the Temple Area. It was enlarged by Herod.

Jerusalem wall towers were square or rectangular. In some instances, the city gates themselves were towers, with numerous rooms. Such is the medieval Golden Gate, whose beautiful interior is closed to most visitors. Round towers of a unique sort, dating from the Iron Age in Transjordan, have been found by Nelson Glueck in southern Gilead near Amman and at Khirbet Morbat Bedran. These evidently served as sentry lookouts for ancient villages whose individual structures were so well built that no town wall was necessary. Thrifty Nabataeans, who from their high capital at Petra dominated caravans and fertile plateaus, improved the older system of fortresses worked out by Edomites and Moabites, as Glueck indicates in *The Other Side of Jordan*. They kept a chain of watchtowers and frontier boundary-posts all the way from Damascus to the Wadi 'Arabah at the head of the Gulf of 'Aqabah (illus. 34).

M. Solomiac, investigating cisterns and sections of the third wall of Jerusalem, found a few years ago a tower having an ancient cistern behind it. The layout suggests that people stationed in Jerusalem's towers, which were sometimes in conjunction with gates, were supplied with water by means of one cistern per tower. One of the largest of such towers was found in 1865 east of the Church of St. Ann. Solomiac believes this tower was once part of the third wall, north of the gate on the site of present St. Stephen's Gate in the east wall (Bulletin No. 81, American Schools Oriental Research).

The watchtower of Jezreel was useful to the spy of King Jehu of Israel (II Kings 9:17). Every good farmer made use of crude, leafy watchtowers to guard his vines and harvest fields (illus. 10). To such a tower Jesus referred in his Parable of the Vineyard in which a householder built a tower near his winepress (Matt. 21:33).

Such references as "Jehovah will be a high tower for the oppressed" (Ps. 9:9) and "The name of Jehovah is a strong

tower; the righteous runneth into it and is safe" (Prov. 18:10) suggest the custom of building such tall towers that people felt immune from harm when once inside. We see examples of this old technique in the strange towers of medieval Bologna and Siena. The classic biblical example, of course, is the Tower of Babel (Gen. 11) (illus. 237).

Towers involved watchmen, as gates implied porters. Hence, we read how David sat between two city gates while the watchman went from the roof of one of them onto the city wall "and lifted up his eyes, and looked, and behold, a man running alone. And the watchman cried and told the king" (II Sam. 18:24-25). The porter spread the alarm. On watchtowers, the call was frequently heard, "Watchman, what of the night?" And the watchman replied, "The morning cometh, and also the night" (Isa. 21:12).

OTHER WALLED CITIES IN BIBLE LANDS

As we stood looking down into the masonry of Ahab and Omri at Samaria, we realized that in the ninth century royal masons of Israel were employing hewn stones more frequently than Solomon's builders, who used mainly cut stones in cornerstones or vital wall stretches. As Burrows points out, the Samaria stones have smooth margins and a consistent pattern of one stretcher and two headers. Samaria was walled and towered for centuries, between the time of Ahab and that of Alexander.

With the walls of biblical Damascus we are familiar through the experiences of Paul, who came into the city by her busy Eastern Gate (illus. 199). From a house built on the wall (illus. 106) he escaped, let down in a basket (Acts 9:25). The Damascus walls today look frail and obsolete for defense in comparison with the power concentrated at her new airdromes.

The early settlement of Athens soon outgrew the tiny Acropolis summit, which then became dedicated to the superb temples crowning the sacred hill. Even this space had to be buttressed and extended by artificial masonry, which is plainly seen in illustration 100. The Beulé Gate of

Athens led to the Acropolis. The Long Walls, connecting the capital with her twin harbors at Phaleron and the Piraeus, survive today in macadam boulevards following much the same course. Paul knew the walls and gates of Athens, from the harbors to the road he followed to Corinth by way of "mysterious" Eleusis.

The ancient Greek walls built on the *Acrocorinthus* above the merchant city on the Isthmus with her east and west harbors, were effective in very early times—powerful, gated defenses, which down the centuries to the Roman period of Paul, and the Byzantine and Turkish days, continued effective—with successive additions. A few vestiges of the early Greek walls can be seen by those energetic enough to make the long, hot climb from Corinth by donkey or foot. Down in the commercial city, beautifully revealed today by American archaeologists, we see traces of the city wall, including the Isthmian Gate and part of the long, double wall joining Corinth with its harbor at *Lechaeum*, as Athens was joined by long walls with her harbors. Paul, embarking for the East, knew the harbor defenses of *Cenchreae*.

Corinth became famous in 500 B.C. for manufacture of decked warships propelled by 300 men in three rows.

The Greek colonial city of Syracuse, founded by Corinth on the island of Sicily, had mighty fortifications in ancient Bible times, built by Dionysius the Elder (402-397 B.C.). This "Castle of Euryelos," constructed some half-century after Nehemiah's restoration of the walls of Jerusalem, held the armed savages of Carthage on the North African mainland at bay for thirty-eight years, protecting Hellenic culture in mid-Mediterranean.

From the detailed description of the Babylon of Nebuchadnezzar given by Herodotus and from records of the German Expedition headed by Prof. Robert Koldewey, who excavated Babylon, we can picture the appearance of the ancient fortified city, in which Hebrews were captives in the sixth century B.C. Nebuchadnezzar, their overwhelming conqueror, so strengthened his capital that he stretched vast and powerful outer walls across the plain between the Tigris and the Euphrates above the city. Right through the city

flowed the cooling Euphrates itself, while a curving canal wound from the castle with its hanging gardens—one of the Greeks' Seven Wonders of the World—to the Ninurta Gate on the southeast corner of the fortification wall. At least two walls and a protective canal moat surrounded the city. Gates named for the deity Enlil entered upon the long Enlil Street. Marduk Street led to the mighty temple of this god. And the Sin and the Shamash gates led into the "new city" on the west bank of the river. Vestiges of excavated streets and buildings and a clay-tablet map enabled scholars to lay out a city plan of Babylon as it looked in Nebuchadnezzar's age.

Illustration 113 shows a restored portion on the northwest side of the famous Ishtar Gate. Colored tile bears in relief, bulls and dragons symbolic of Chaldean might. Also, a brick from the paving near this gate, bearing Nebuchadnezzar's name, appears in illus. 115. This splendid square-towered gate, with arched portal, commanded the city entrance at the north wall. It led to the palace and the hanging or terraced roof gardens, and to the broad Procession Street running to the Temple of Ishtar and the Marduk Temple with its monumental Tower of Babel. There is amazingly little left to show the vast material splendor of the famed city of Nebuchadnezzar. Here such Jewish captives as the young Judæan King Jehoiachin—the flower of the Jerusalem nobility, the prophet Ezekiel, and the anonymous author of Psalms 42 and 43 longed for the land of the Jordan, Hermon, and the little hill of Mizar. They were confident that God would send out his light and his truth to lead the captives again to the holy hill of Jerusalem's Temple. The mere thought that God would ultimately help the banished refugees back to their ancestral altar drives away disquietude, as the captive psalmist sings among the waters of Babylon, within her mighty fortress, or among her gardens:

Why art thou cast down, O my soul? . . .
Hope thou in God; for I shall yet praise him.

No doubt King Jehoiachin, who was treated with greater favor at Babylon than

other captive rulers, walked daily within sight of the Ishtar Gate and knew the walls of Babylon as well as he remembered the walls and gates of his own Jerusalem.

Sargon the Second equipped his palace at Assyrian Khorsabad (built after his accession in 722 B.C.) with massive gates; at least, Breasted has inferred as much from their stone blocks, 5 by 10 ft. in size. On one of these stones, found near the enormous gates, were carved annals of the cruel Assyrian who deported tribes of Israel from Samaria. At Khorsabad, also, was found an Assyrian defense device: the entrance leading to the stone-paved street of the city of Darius and Xerxes was sometimes blocked with rubble instead of being equipped with gates.

The walls of Rome, as Paul saw them and as they existed for centuries before him, were never as famous or as well built as those of Jerusalem. The Tiber protected the hill-based city on the west. The first earthen walls fenced in the Palatine and Capitoline hills, leaving the Aventine outside. And those ascribed to Servius Tullus guarded the city down to the Punic Wars. Today fragments of ancient walls appear in modern streets, for example, in the Via Nazionale. And at the Gate of St. Paul, near the Pyramid of Cestius, there is a portion of wall which was once heavily fortified. Most interesting to us as Bible students are the Gate of St. Paul, which was the ancient Ostia Gate, leading south to the port of Rome; and the Gate of St. Sebastian, which in Paul's day was the Appian Gate. By this he must have come into Rome from the old Appian Way, the "Queen of Roads." The road, built by Appius Claudius Caecus in 312 B.C., ran as far as Capua and later was extended to Brindisi.

The two-faced Roman god Janus was carved on city gates, whose god he was. Janus had several temples in Rome which kept their gates open in times of war but closed in peacetime. They were shut only once between the era of Numa and that of Augustus. The gated Temple of Janus, which was best known, is carved on a beautiful silver denarius of the Augustan period, which could have circulated in Palestine in the lifetime of Jesus.

ARMS AND WEAPONS

IN PALESTINE

BEFORE THE MONARCHY

Before the Hebrew monarchy, weapons were primitive. The oldest arms of man were sticks, clubs, darts, and stones. The last mentioned are a favorite today all over this stony land, as we ourselves observed in riots. Darts were used by Joab to end the life of Absalom, after he had been wounded at the Battle of Gilboa. Stone balls, the size of a man's hand-grasp, of limestone or flint, proved effective weapons. David found his sling-stones in the brook of Elah and proved the accuracy of his aim by planting one in the forehead of the well-armed giant, Goliath (I Sam. 17) (illus. 116). The men of Benjamin, we are told in Judges, developed such skill with stones and slings that they could hurl them within a hair's breadth. Frequently stones were pelted down on enemies from walls or heights, or were shot from slings. David, like all boys of that day, made such a sling, winding into yarn the fleece from his father's sheep. The biblical sling, as Ovid Sellers describes it in *The Biblical Archaeologist*, was not like the modern one, made from a forked stick, by boys pursuing birds. It had two long cords with a pocket in the center to receive the stone. Whirling it by the cords, the fighter suddenly released one cord, and the stone flew to its target. Flint sling-stones, such as have been found at Tell Beit Mirsim, were often carefully worked and polished.

During the excavation of the third wall of Jerusalem, as described by Prof. Sukenik, a stone ball similar to one from Megiddo in the authors' collection was found on the southern side of the wall facing the city. These balls, the forerunners of our hand grenade save that they contained no explosive, gave terrific blows to victims at a distance of what Josephus describes as "two furlongs or further." The blow was in no wise to be sustained by those at whom it was aimed and by those who stood in its way. They were about 30 centimeters in diameter and weighed about 23 kilograms.

WEAPONS OF JOSHUA

Joshua used the *javelin* at his conquest of Ai-Beth-el. He stretched out his hand to hurl it as signal to his ambushed men to set on fire this important city of the plain. But the main weapons of this attack were swords with which his men pursued the retreating citizens of smoking "Ai." Swords appear to have been the chief weapons of Joshua's conquests. The Book of Joshua tells how, time and again, the Hebrew warrior smote with the edge of his sword king after king, "from Kadesh-barnea even unto Gaza, and all the country of Goshen, even unto Gibeon." Using his infantry's sword power, he was successful at Lachish and took Hebron, which later became the first capital of David. In a cave at Makkedah he pent up and slew five petty kings of Amorite tribes who, hearing how Joshua had taken Jericho and "Ai" and the mighty royal city of Gibeon, had sallied forth to offer him battle at Gilgal. What Israel had inflicted upon Sihon, King of the Amorites east of Jordan, and upon Og, King of Bashan, had been reported by spies with terrifying results. By "smiting with the edge of the sword," Joshua seized, also, northern strongholds such as Hazor (Josh. 11), capturing cattle. He dominated the landscape as God had commanded until only such strongholds as Gaza, Gath, and Ashdod on the Philistine Plain remained unsubdued. Actually, the process of Hebrew settlement in Canaan was long and gradual, involving many a peaceful settling down among neighbors whose ideas proved useful when the land "rested from war." Customs were intermingled; religions and marriages were mixed, often to the detriment of Israel, but sometimes to her cultural and spiritual enrichment, as we learn from the Ras Shamra tablets.

But primitive swords of Israel, as well as simple oxgoads with metal tips, and plowshares, mattocks, and axes, had to be sharpened. And although there were copersmiths in Palestine in the time of Samuel, ironsmiths were scarce. The Philistines saw to it that they remained scarce, "lest the Hebrews make them swords or spears." They had not only military blood in their eye but also a commercial ambition, for

when Israel took her tools to Gerar to be sharpened, heavy charges were made. Albright suggests, by his careful translation of a certain word in the Hebrew text, that simple implements and weapons cost as much as two-thirds of a shekel for repair—a considerable sum. The Petries discovered at Gerar a sword factory and an iron-smelting center, with four furnaces. Near one furnace, especially for swords, they found spearheads, daggers, and arrowheads made about 1300-800 B.C. This domination of the sword industry continued into the time of Saul. A picture of the Gerar sword furnace appears in Duncan's *Digging Up Biblical History*, Volume I, page 144.

Bows and arrows were commonly used in primitive Israel's warfare. They had been in wide use among the Sumerians to their east, along the Euphrates, more than 1,000 years before Joshua, as we see in art portrayals (illus. 108) of archers in chariot. The battle bow continued to be a favorite weapon of Babylonians and Persians down to the Battle of Marathon, where it was a matter of Persian bow against Greek spear. The spears won out in that memorable contest of 490 B.C. The extensive extant bas-reliefs show archers conspicuous in the armies of a Shalmaneser, for example, laying siege to a Syrian city, or in the ranks of Sennacherib attacking Lachish or an Egyptian stronghold in the seventh century B.C. Job, apparently a dweller east of Jordan in Edom, felt himself compassed about with archers (16:13). Zechariah, envisioning a messianic era of peace, hoped for the disappearance of weapons of war—battle bow, chariot, arrow, and sling-stone. Very ancient is the fallacy that "disarmament guarantees peace."

Daggers, when used by primitive Israel, had been captured from Philistines, who before the Hebrew conquest were using metal knives with handles of inlaid ivory. A sheath and chain attached the dagger to the upper arm of the warrior. Hittite daggers have also come to light at Beth-shan, guarding the eastern Plain of Jezreel at the gate of the Jordan. A fine example of this the favorite weapon of Hittite warriors was found at Beth-shan in the debris level of Egyptian Tuthmosis III. Hittite kings carried such arms, as well as bronze-headed axes. By the time of David, who conquered

a Hittite stronghold at Kadesh in the tenth century B.C., the amazing Hittite warriors had moved far north.

WEAPONS OF PHILISTINE ORIGIN

It is claimed that Cretan Philistines and Sardinians used two-edged swords made in the north soon after the discovery of tin. These bronze weapons as early as 1200 B.C. were threatening Egypt. The ancient world stood in terror of such sword-bearing might. Philistines also knew the wisdom of helmets. The great skill of their archers at Mount Gilboa wounded Israel's first king so sorely that Saul took his own sword and fell upon it to end his agony. "So Saul died, and his three sons, and his armor-bearer, and all his men, that same day together" (I Sam. 31:6).

IN THE EARLY HEBREW MONARCHY ARMOR OF SAUL AND DAVID

In the early Hebrew monarchy the same weapons were used which had prevailed in the days of the judges. We read of Saul's sleeping with a barricade of wagons to protect him. His spear was stuck into the ground at his head (I Sam. 26:7) where he could easily reach it if overcome by one of his fits of rage against his musician and armor-bearer, David. Time and again, he tried to spear David while the youth was playing the lyre with his hands. We know, too, from Jonathan's gift to David of his royal sword, bow, and girdle, that this was standard equipment at least for the king's household. That armor in the form of helmet and cuirass was available to the fortunate few, we know from Saul's offer to lend David his armor for the contest with the Philistine giant Goliath, who was fully armed with metal from the crown of his head to his knees, and probably with leather shin-guards. An enormous round shield was bound to his forearm by two bands of metal or leather. Samuel relates that "he had a *helmet* of bronze upon his head, and he was clad with a coat of mail; and the weight of the coat was five thousand shekels of brass [copper]. And he had greaves of bronze upon his legs, and a *javelin* of bronze between his shoulders. And the staff of his spear was like a

weaver's beam . . . and his shield-bearer went before him" (I Sam. 17:7). The armor of Saul, which David declined in favor of his sling-stones, was also of bronze or copper. In earlier times, armor was of leather or quilted fabric. (See gold helmet from Sumeria, illus. 114.)

The bow and arrow continued popular in the monarchy, as we know from the famous story of how Jonathan saved the life of his friend David by placing a little lad in a spot agreed upon and shooting arrows just beyond him. Thus David got the signal to go farther away from Saul. When fugitive David surrounded himself with Gideonites and men of Gad who were noted for their physical prowess, they were clever enough to "use both the right hand and the left in shooting stones and in shooting arrows from the bow." These men were "trained for war, that could handle shield and spear, whose faces were like the faces of lions, and they were swift as the roes upon the mountains" (I Chron. 12:1ff.). Thus we see that in his early career the men of David were armed with simplest equipment. Their physical courage and sense of destiny under God were a mighty reinforcement. Chariots were just beginning to come into use by Israel during the reign of David. We infer that the king secured these as booty from defeated enemies; he took from Hadadezer, who ruled near the Euphrates, "a thousand and seven hundred horsemen, and twenty thousand footmen: and David hocked all the chariot horses, but reserved of them for a hundred chariots" (II Sam. 8:4). To this war booty he added, from Syrians whom he defeated, shields of gold, and much copper—great treasures, in a reign still woefully lacking metals. The vessels of gold, silver, and copper from his loot David dedicated to Jehovah. Thus "David gat him a name" for valor, when he came from smiting Syrians and Edomites. He set up his own garrisons to hold the territory he conquered, and all Israel was united under him for the first time. The spears, bucklers, and shields which had been David's were stored in the "house of God." Generations later, they were brought forth when the young king Joash was crowned.

Garstang gives a good brief account of

David's able reorganization of Israel's military system, with the royal family and their close staff of generals heading it. He divided the army into three parts, each with its leader, under whom were captains of thousands and captains of hundreds. He incorporated much he learned from the Philistines; he organized a royal body-guard, with two groups of mercenaries which were retained by his son Solomon.

By the time of Solomon's accession, weapons showed as much advance as all other material aspects of his reign. The chief innovation was the *chariot*. This king had his royal merchant marine, a navy or several navies "of ships in Ezion-geber, which is beside Eloth, on the shore of the Red Sea, in the land of Edom" (illus. 34). These ships, which brought regular cargoes of metal from his smelteries, as well as gold and luxury-goods, helped make Solomon the richest and "wisest" of all the kings of the earth. "And Solomon gathered together chariots and horsemen: and he had a thousand and four hundred chariots, and twelve thousand horsemen, that he bestowed in chariot cities, and with the king at Jerusalem" (I Kings 10:26). Megiddo, overlooking the Plain of Esdraelon, constitutes one of the most ideally excavated sites which modern archaeologists have had the privilege of digging from oblivion. The work proceeded under the remarkable leadership of the late James H. Breasted for the Oriental Institute of the University of Chicago, with funds supplied by John D. Rockefeller, Jr.

From 1926 through 1939, the directors of excavations were Dr. Clarence Fisher, Mr. P. L. O. Guy, and Mr. Gordon Loud. Assistants included able staffs trained at such centers as the Oriental Institute. Completion of investigation of the huge mound awaits future expeditions in times of peace. We have been thrilled, walking over this layer cake of history commanding the famous pass over Carmel Ridge south to Egypt, to see the stone mangers from which Solomon's chariot horses ate their grain, and many stone hitching-posts with well-worn loops, where their bridles were fastened (illus. 21). In fancy we have heard the prancing steeds of Solomon's chariots come up through the gate from the plain

to the palace of the governor, where he reviewed them with pride.

Estimates of excavators place the number of horses stalled at Megiddo at some 450, with places for about 150 chariots. And Megiddo was but one of his chariot cities. The equipment he thus probably accommodated, as indicated also by excavated Hazor, gives credence to the statement of I Kings 4:26, 9:15-19, and 10:26, that he had "a thousand and four hundred chariots, and twelve thousand horsemen." The statement that he had "forty thousand stalls of horses for his chariots" is probably more correctly translated in II Chron. 9:25 as "four thousand." The reference of I Kings 9:19 to Lebanon, in connection with Solomon's pleasure equipment, recalls the lines of the Song of Solomon (3:9):

King Solomon made himself a palanquin
[chariot]
Of the wood of Lebanon (3:9).

Albright, in *Archaeology and the Religion of Israel*, points out that a large part of Solomon's economic prosperity was due to his trade in horses and chariots as well as to his industrial enterprises and tribute exactions from even the Philistines and states of Transjordan and Syria. These horses he imported, according to I Kings 10:28, 29, from Cilicia "at the current price." Not from Egypt, but from Cilicia—we emphasize, after Albright's new translation of this formerly obscure passage—came the horses which Solomon transhipped south to Egypt. Likewise, he imported from Egypt very fine chariots, retaining some for himself and selling others to Syrians, who had exported hard wood to Egypt for their "manufacture." Thus Solomon found himself at the literal crossroads of the two most coveted articles of his day. It is believed that four Cilician horses were traded for one fine Egyptian chariot, for much time and labor went into making a strong chariot. A horse merely grew.

Who can forget the pursuing chariots of the Egyptians who followed the Hebrews and met their destruction in a tidal wave as they attempted to cross the Red Sea—"six hundred chosen chariots" and their captains (Ex. 14:7)? In the period of the judges, Barak and Deborah faced vic-

toriously the war chariots of Sisera, captain of the hosts of the Canaanite King Jabin who ruled at Hazor. Chariots did not participate in mountain warfare but were used on low ground. Seven hundred chariots of Syrians are mentioned among the prey of David on one occasion (II Sam. 10:18). Ahab, King of Israel, drove to the contest at Mount Carmel, between Elijah and the priests of Baal, in a chariot; he also drove furiously to escape the pursuing Jehu. This same evil ruler met his end in a chariot, when a Syrian bowman shot him "between the joints of his armor," or between two pieces of his mail. He died in his chariot and was taken to his capital at Samaria. "And they washed the chariot by the pool of Samaria: and dogs licked up his blood" (I Kings 22:38). Another example of a king's war chariot becoming his hearse is the story of Ahab's son, Ahaziah, slain in his chariot by Jehu at Megiddo and carried in it back to Jerusalem for burial "with his fathers in the city of David" (II Kings 9:27, 28).

For Elijah's ascent in a "chariot of fire," see II Kings 2:11.

A more happy chariot narrative in the Bible is that of the black man from Ethiopia. Faring south to Gaza on the coast after worshiping at Jerusalem, he was met by Philip, the evangelizing follower of Christ. Said Philip to this eunuch of Queen Candace, as he saw the earnest worshiper of Jehovah standing in his chariot reading the prophesy of Isaiah, "Understandest thou what thou readest?" Not only did the Ethiopian invite Philip into his chariot to explain the passage, but he halted his vehicle by a desert well and asked Philip to baptize him. No wonder Philip, after doing so, "went on his way rejoicing" (Acts 8).

THE STORY OF THE CHARIOT

The history of the war chariot challenges greater space than we can here give it. "Some trust in chariots, and some in horses, but we will make mention of the name of Jehovah our God," declared worshipping Hebrews. Yet they were glad to equip themselves with what their plain-dwelling neighbors had when it was possible. The Hyksos shepherd kings are given

credit for introducing chariots into both Palestine and Egypt. These chariot warriors were at their height in the seventeenth and sixteenth centuries B.C., long before the arrival of Hebrews in Canaan. But we must push to a still earlier date the first known use of chariots. As early as 3000 B.C. Indo-European Mitanni people, who had probably come from the horse-breeding section around the Caspian Sea and ultimately established a kingdom northwest of Assyria and southeast of the Hittite Empire of Asia Minor, were using horses to draw wheeled vehicles.

But the earliest picture we now have of a chariot comes from Ur of the Chaldees, where a broken limestone plaque was found in the Royal Cemetery (dated before 3000 B.C.). A fragment of this plaque, now in the University Museum at Philadelphia, appears in illustration 108. This very ancient two-wheeled chariot, its clumsy, solid-disked wooden wheels made of two semicircular pieces clamped around a central core with copper, is the oldest wheeled vehicle of which we have any picture. It is drawn by "mythological animals." The driver is walking, reins in hand. Note, in the picture, the high front-board and the pole which rises on a curve to support the rein-ring (often whimsically decorated with a little statuette of a mule or other animal) before the pole joins the yoke over the neck of the animals. See the whip of the fleece-skirted Sumerian driver; note the high arches the artist has given his feet, and those of the groom and the servant, who follows carrying a food-bag. See the dotted leopard skin hanging over the dashboard and the quiver of darts and javelins at left of this front-board. There is evidence that this chariot plaque was intended to show how the Sumerian king made a gift to his god, of the state vehicle. This little work of art is one of the oldest known Mesopotamian sculptures.

Sumerians made four-wheeled, as well as two-wheeled chariots. These looked something like modern baby perambulators. A sledge type of chariot was also in vogue in the fourth millennium B.C. Its flat, up-turned wooden runners made as good time over Babylonian mud as Siberian sledges over the frozen snow in later centuries. See illustration 108.

Therefore, we wonder whether Israel in Solomon's time was reaping some of the rich cultural values of the old Mesopotamian home of Abraham, as well as of Hittite charioteers who had drunk from Caspian sources. The Caspian region for thousands of years furnished fine horses for Persia and today supplies the U.S.S.R. and Iran.

An interesting chapter in the horse-and-chariot history of the Middle East has been opened by a clay-tablet letter written in c.1800 B.C. to the King of Mari in eastern Asia Minor at the head of the Euphrates by an envoy at the court of Carchemish. The letter reports that the ruler of Carchemish (*Bulletin No. 77* of the American Schools of Oriental Research) cannot furnish "white chariot horses but can provide bay or chestnut horses from Kharsamna," a place which became later the capital of the Hittite Empire. Certain Hittite texts and Cappadocian tablets show that horses were coming into use for military purposes in Asia Minor as early as 1900 B.C.

The first mention of an Egyptian chariot in Scripture is Gen. 41:43, where we see Joseph riding "in the second chariot" of Pharaoh. In Gen. 50:9 we read of the chariot escort allowed Joseph when he went north to bury his father Jacob at Mamre (Hebron). That was, of charioteers and horsemen, we are told, "a very great company." The sort of Egyptian chariot used by Joseph was a light, plaited leather platform, having a splash-board filled in with leather, a center pole with curved yoke fitting over the horses' necks, and spoked wheels (illus. 110). The driver stood; the passenger crouched.

Later Egyptian chariots were made of hard wood imported from the Lebanons, often carved and overlaid with precious metals. There were times when Egyptian chariots, as symbols of that land's dominating influence, had to stand the test of rivalry with the Assyrian chariots of a Sennacherib, bidding for the surrender of Jerusalem.

In the Egyptian Museum at Cairo we have seen several state chariots of the sumptuous Eighteenth Dynasty of young King Tut-ankh-amun. One of these has its wooden body covered with gold stucco,

with relief designs and bands of colored glass inlay. At the center, names of the king and queen stand out under the protection of a falcon's wings. Between the rails, near the place where the king stood, is a row of Negro and Asiatic prisoners. At the back of another of the king's chariots are two heads of the god Bes. The wheels are beautifully gilded—as ornate as the heavy wheels of Sicilian peasant carts in our time (illus. 148). Yet they look too frail to have inspired dread in the Hebrews. An innovation comparable to tanks in our day, they look as if they would scarcely have held together until they went into battle. We were impressed with the leather tires on the king's chariot, and with the goads and blinkers worn by the horses.

Mesopotamian chariots were extremely heavy in the eighteenth century B.C. and did not become practical for warfare until the military horse-drawn chariots of the sixteenth century came into vogue in lighter form. Throughout all the history of the peoples living "between the rivers," chariots were conspicuous. Bas-reliefs of Assyria are rampant with them. We know that Darius had eight-spoked wheels to his mule- or horse-drawn chariots. One Assyrian carving shows a chariot with three men in it—driver, king, and attendant holding a sunshade over the king in the heat of day. The Persians of the fourth century B.C. brought out chariots to whose axles scythes were attached. Thus they mowed down the troops of Alexander the Great at the Battle of Arbela in 331 B.C.

Etruscans, who may have come out of Lydian Asia Minor into Italy, were as adept at making chariots as they were in fashioning lovely gold jewelry. A fine Etruscan chariot of c.550-540 B.C. stands in the Metropolitan Museum of Art in New York (illus. 111).

A Roman chariot, or *quadriga*, of the first-century Titus, appears in illustration 112.

Chariots were used not only for battle but for sport. A Ugaritic bowl engraving of very early date shows a king of this north Syrian coast standing in a hunting chariot, shooting an arrow at an antelope. The king has tied the reins to the chariot pole and around his waist, so that he may have complete freedom for his careful drawing

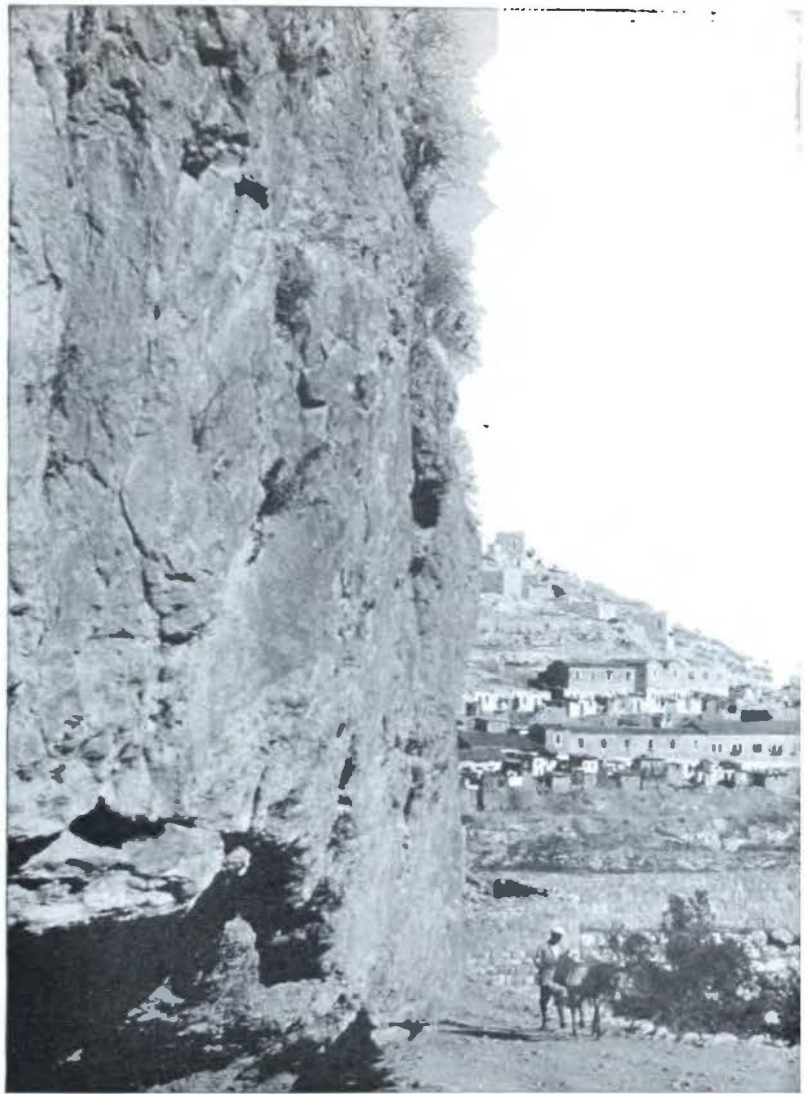


99. Sardis, capital of Lydia in Asia Minor, with Mount Tmolus in background. Hermes River, center. Home of rich Croesus. In foreground, ruins of the voluptuous city (Rev. 3:1) rebuilt with imperial funds after the earthquake of A.D. 17.

100. View of Athenian Acropolis from the Hill of the Muses. Parthenon, "most perfect monument of ancient art," at center. Erechtheum to its left. Propylaea entrance, left edge of picture. Extreme right, peaked Mount Lycabettus, 360 ft. higher than Acropolis. Bottom left, arches of Odeion of Herodes Atticus with Boulevard of St. Paul. Note shoring-up of the small Acropolis with artificial masonry, to increase the size of this tiny hill for defense and for worship (Acts 17).



101. Scarp of rock at southwest angle of Jerusalem overlooking Valley of Hinnom, used by Jebusites to aid the defense of the hilltop when attacked by David (I Chron. 11: 4-9).



102. Jerusalem's Damascus Gate, entering the north wall of the city and leading to Syria and Damascus.





103. Open space inside Jaffa Gate, Jerusalem, with the Citadel at left. Jaffa Gate, in the west wall of capital, leads to Hebron and is called the "Gate of the Friend," reminiscent of Abraham, Friend of God.



104. Southeast corner of Jerusalem wall. Lower sections have through centuries survived military assault. One of the huge stones here may have suggested the comment of Jesus concerning the "head of the corner" (Matt. 21: 42), applied by Peter to Jesus himself (Acts 4:11). Outside wall, to right, the Mount of Olives, and the Russian Church of Mary Magdalene.



105. Imaginative portrayal of the destruction of Jerusalem A.D. 70, by Francesco Hayez (1791-1882).

106. The insignificant walls of Damascus today. The house suggests the one from which the Apostle Paul was lowered in a basket to escape enemies (Acts 9:25).





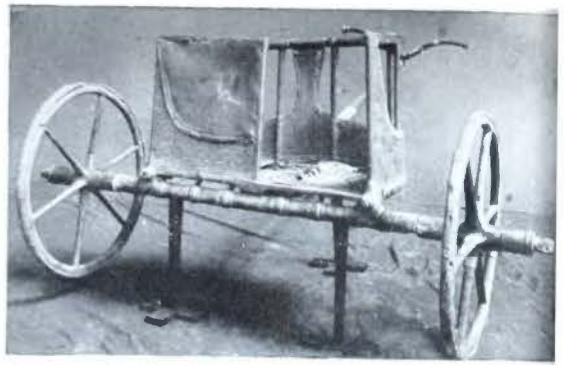
107. Guard-room at Lachish, excavated by the Wellcome-Marston-Mond Expedition. Here were found sixteen of the famous Lachish Letters on potsherds, inscribed with ink in nonliterary Hebrew such as was used just before the Exile. Several were addressed to the military commander at this frontier post in the sixth century B.C., when Babylonians were threatening Jerusalem. Shoulder of Lachish mound is seen at left, with expedition-staff quarters in background.

108. Limestone plaque showing chariot of Sumerian Ur, c.3000 B.C. (University Museum, Philadelphia)





109. Hittite chariot and bowmen triumphing over bearded enemies.



110. Frail but swift Egyptian chariot, in Metropolitan Museum of Art. (Metropolitan Museum of Art)



111. Artistic Etruscan bronze chariot (550-540 B.C.) (Metropolitan Museum of Art)

112. Roman four-horsed chariot (quadriga) bearing the Emperor Titus driven by the goddess Roma, while Victory holds a crown over his head. This marble relief is on the vaulting of the Arch of Titus in Roman Forum.



A black and white photograph showing a narrow alleyway between ancient stone walls. The walls are constructed from large, rectangular blocks and show signs of weathering and damage. A small, light-colored animal, possibly a goat or sheep, is visible in the distance, standing near a doorway or opening in the wall on the left. The ground is uneven and appears to be dirt or stone. The overall scene suggests an archaeological site or a historic town.



116. David decapitates Goliath. Stone from shepherd boy's sling is in the forehead of giant. Philistines are in full flight (I Sam. 17:50-51). This marble bas relief is on the façade of Milan Cathedral.

of the bow. An Egyptian scene also shows a farm supervisor arriving by chariot to look over the laborers' accounts.

The Minoans of Crete, who gave us so many first things in art and culture, have left a fresco showing two girls driving a chariot. These ancestors of the Amazons, Waves, Wacs, and Spars wear simple chitons or smocklike garments, with tiaras on their heads above long Cretan side-curls.

STRATEGY IN BIBLE LANDS

Booty was a source of new equipment. Some of the first war chariots of the Hebrews were acquired in David's time in that manner. Also, captives became reinforcements for depleted troops. Iron and bronze were taken and made over into weapons. Gold and silver vessels found their way into treasuries of Hebrew kings. The loot taken by the great Egyptian invader of Palestine and Syria, Tuthmosis III, included more than 2,000 mares, 1,900 oxen, 20,000 sheep, 7 silver-plated tent poles, 17,000 golden rings, a golden plow, cedarwood tables inlaid with gold and stones, scepters, embroidered robes, and—best of all—200,000 bushels of new corn from harvest fields such as Esdraelon.

Camouflage was used in ancient Bible times. In Josh. 9 we read that inhabitants of the near-by Gibeon dressed up in old sacks and rags, carrying stale bread in their pouches, to indicate that they had come on a long journey and were suing for peace. Strategy is again seen in the record of wily Israel battling against the Benjamin tribe (Judg. 20).

Fire was sometimes used to destroy well-built cities of Palestine, whose walls were ringed with blazing olive trees. Nelson Glueck cites the burning of soft limestone hills in Transjordan today, to secure lime, as proof that in ancient Bible times even stone walls and houses could be reduced by fire. We know what the combustible composition called "Greek fire" did to ships at sea. Blazing arrows also were shot into enemy positions. Samson, the Hebrew strong man of the tribe of Dan, fastened firebands to foxes' tails and sent the animals into the standing grain of the Philistines. This strategy proved an effective

attack on the harvest fields as well as on the olive groves (Judg. 15:4, 5).

No picture of the weapons brought against Jerusalem and other parts of Palestine by Babylonian, Assyrian, and Chaldean masters of warfare would be complete without the battering-ram and siege-engine. The battering-ram, used by Palestinians themselves against enemy walls, was a huge pole, tipped with metal or a rounded head, and thrust by a group of attackers against masonry with a forceful thrust. Often the ram was set up in a wheeled tower or roofed cover and shoved near the desired point. Men working the battering-rams would otherwise be exposed to arrows of enemy archers on already captured portions of a city wall. That Uzziah, King of Judah (780-740 B.C.), had already learned the value of the battering-ram in his attacks on the Philistine cities may be implied from the terminology of II Chron. 26:6: he broke down walls of Gath, Ashdod, and Jabneh. In defending Jerusalem, this same eighth century Judean king armed Jerusalem's walls with "engines, invented by skilful men, to be on the towers and upon the battlements, wherewith to shoot arrows and great stones" (II Chron. 26:15). The Hebrews learned war equipment from enemy-neighbors. Therefore we assume that if Uzziah had such engines as the Chronicler implies, he had profited from such sieges as Benhadad of Syria and Ahab of Israel had already faced at the hands of Shalmaneser, or from Ashurnazirpal's approach to Hebrew territory in 884-860 B.C.

The siege-engine as the Babylonians and Assyrians used it was the "tank" or tower covering the battering-rams, a device which continued to be used in Palestine through the period of the twelfth-century Crusades against Islam. Possibly, the "forts" built round about Jerusalem when Nebuchadnezzar came out of the north, were siege-engines set up on the mounds built against the city walls. Ezekiel, describing this same attack, includes the forts built against the city and the enemy camps, and the battering-rams planted around Jerusalem. Again, prophesying the siege of Tyre, Ezekiel (26) wrote: "Thus saith the Lord Jehovah, I will bring upon Tyre Nebuchadrezzar king of Babylon . . . with horses and with chariots, and with horsemen, and a com-

pany, and much people . . . he shall set his battering-engines against thy walls, and with his axes shall he break down thy towers. By reason of the abundance of his horses their dust shall cover thee; thy walls shall shake at the noise of the horsemen, and of the wagons, and of the chariots, when he shall enter into thy gates, as men enter into a city wherein is made a breach." This description by the sixth-century prophet gives us a vivid glimpse of the might brought against unprepared Israel by dreaded attackers.

When Palestinians set themselves in revolt against fellow-Hebrews, they seem to have used the devices of their outside enemies. When, for example, a fellow named Sheba revolted against David, Joab and his adherents attacked him in the city. Abel of Beth-maacah, casting up a mound to lift the attacks, "and all the people that were with Joab battered [undermined] the wall, to throw it down" (II Sam. 20:15).

EGYPTIAN DEFENSE

In addition to their famous chariots, Egyptians had fine javelins or spears, with finely worked heads, from the celebrated Fayyum industries. A lovely statuette of young Tut-ankh-amun hunting, with javelin poised, is in the Egyptian Museum of Cairo. Egyptian long bows were made effective weapons by fine arrowheads. Their knives developing from prehistoric flints, Neolithic polished stones, copper-and-gold blades of the Old Kingdom, and the art daggers of the New Kingdom form an interesting study. Arrows of bronze, some with feathers still intact; arrows with pellet-shaped or spear-shaped heads; arrows with points of ivory, glass, or wood, some flaring and some blunt, all are among the exhibits in the Cairo Museum in the Tut-ankh-amun collection. We have seen there, too, a strange flint knife mounted in gold, the famous silver military trumpet trimmed with gold, the ebony sword or throwing stick, and a set of bark-covered clubs. A shield of this Eighteenth Dynasty king is of wood covered with gesso and painted; over this is stretched the skin of a cheetah, some of whose hair remains. Double-headed axes, made of flint or stone, were useful for peacetime implements as well as

for weapons. Early Egyptians much preferred farming to fighting and were glad to have the black Nubians, who loved combat, summoned by commanders when foreign expeditions were being organized. The military equipment of an Old Empire Egyptian soldier consisted of a skullcap, possibly of leather; a leather shield; a long-bow with quiver of flint-tipped arrows on his back; a mace, or club; a long spear; a curved dagger; and sometimes a battle-ax. Long swords were not used by early Egyptian infantry.

The University Museum in Philadelphia has several archaic Egyptian weapons. A copper ax-blade dates from c.2200 B.C.; a leaf-shaped spearhead, from 1900 B.C.; a copper dagger, from 1800 B.C.; and a bronze sword with ivory handle, from c.1450 B.C.

The apparel of an Egyptian warrior, in the early period, was a short linen skirt, or kilt, with a heart-shaped leather guard. His uniform remained almost as simple in the New Kingdom, except that officers aimed at swank by carrying large ceremonial ostrich fans, battle-axes, and short swords. Because of the hot climate in Egypt, heavy armor did not appear until the New Empire and then consisted only of scales of metal or bone sewed to linen or leather hauberks. No ancient armor equaled the Roman, a superb example of which is the Hadrian marble torso in the Athenian Agora. In the towers excavated at Dura on the upper Euphrates were found a leather shield bearing a map and, also, shields of wood covered with stitched leather.

Another Egyptian defense provision was her strong forts. They were erected in series, as at the Second Cataract, for example, to prevent the war-loving Nubians from descending the river to lay fertile Egypt waste. Such forts, of mud-brick, many feet thick, with stout ramparts and heavy gates, had sloping reinforcements of stone thrust against them. They were equipped with barrack rooms for troops, ample store-chambers for supplies, and a temple dedicated to the favorite god of the district. The copper mines of Sinai Peninsula were guarded by well-garrisoned forts. Chains of forts protected the frontier between the northeastern Delta and Syria. Even today

this is a jealously guarded area along Suez Canal, which not until World War II was bridged. The primitive ferry from Kantara East to Kantara West was considered safer from the point of view of defense.

Of navies, Egypt had not much need. Her geographical position gave her protection; moreover, her peasants were as uncongenial to seafaring as to warfare. However, in the Fifth Dynasty, under Pharaoh Dedkere-isesi, the military chieftain Uni led an expedition against the rebellious barbarians in the "Land of the Gazelle-Nosed People" (Palestine). The monarch used troop-ships to cross over for a landing above Gaza, whence he could penetrate to the highlands of the Shephelah. One of the most famous sea fights in which Egyptians took part was the naval engagement in which Ramesses III (1198-1167 B.C.) successfully pitted his warships, manned, however, with crews from neighboring seafaring-nations, against a federation of Libyan tribes. Even for the important peacetime commerce with Phoenician Byblos, Egypt at a very early date employed foreign ships sometimes, in addition to her own sailing vessels called "Byblos Travelers."

In the Lands between the Rivers:

Sumerians, who enjoyed life in southern Mesopotamia long before Babylonians or Assyrians, left for their successors in the ancient Middle East not only the four-wheeled war chariot and the battle-bow but the pattern for a helmet which has never been exceeded for beauty. It had, also, many efficient features. The solid gold helmet of Mes-kalam-dug, now in the Baghdad Museum and accurately reproduced in yellow metal in the University of Pennsylvania Museum, was fashioned before 3000 B.C. From the standpoint of the goldsmith's art it has never been surpassed. It was beaten with primitive tools, and was carved with locks of hair unimaginably fine and "set" in croquignole curls such as women wore in the 1940's. Curls on the cheek-pieces represented side whiskers. At the nape of the neck there is provision for covering the chignon, or hair-knot, of the hero. Also, the two ear-pieces have openings, to facilitate the hearing of the chieftain. The "Cellini" of ancient Sumerians need not have hesitated to have this chef-

d'oeuvre placed alongside the work of his fellows in any age. The gold helmet of the hero who lived possibly 1,500 years before Abraham's birth was found by Sir Leonard Woolley. There remained fragments of the lacers which had fastened the helmet to an inner padded cap.

Other actual specimens of Sumerian weapons fabricated near the home of the Patriarch are the golden-sheathed dagger with its handle of lovely lapis lazuli (in the University Museum at Philadelphia), copper spearheads, electrum double ax-heads, and flint-headed arrows. In illustration 108 note the quiver of spare darts and javelins. When we place all these adequate weapons alongside the noble Sumerian musical instruments, we have a feeling that these ancient dwellers in the southern flatlands of the fertile Euphrates knew both how to cultivate profitably their date groves and farms and how to enjoy delightfully the leisure afforded by economic security.

The famous Mosaic Standard of Ur, set up in time of battle in the midst of troop concentrations, carries a "motion picture" of various peace and war scenes. The latter show, in remarkable inlay of shell and lapis lazuli, what Woolley describes as the "royal Sumerian army phalanxes." Copper-helmeted infantrymen wear the same sort of heavy woolen cloaks worn by shepherds in Bible lands today, and possibly by Abraham, the shepherd-sheik of Israel. Lighter armed infantrymen carry short spears or axes, and charioteers are armed with javelins and spears. Woolley enthusiastically tells us that this mosaic standard is the first picture we have of the Mesopotamian army which, through the centuries, carried civilization from the Persian Gulf to the heart of Asia Minor; this army used chariots 2,000 years before the Hebrews of Deborah's time became terrorized by these vehicles; it knew phalanxes like those which made Alexander the Great famous 3,000 years after the Sumerian phalanxes won their gala victories.

From the simple mosaics of Ur developed the great mosaic art which continued to adorn palace and worship place through the Early Christian, Byzantine, and medieval centuries.

People of ancient Bible lands had reason

to fear the armed might of the Assyrians and Chaldeans more than any other foe. These were the greatest fighters of the ancient world. Art records reveal their warlike spirit. They used chiefly tightly strung bows, which shot their mighty arrows from chariots into the enemy ranks far away. Their powerful cavalry attacks wrought havoc. From the Assyrians, the Persians, who fought the Greek spear-bearing phalanxes, borrowed the technique of bows and horsemen. Assyrians and Chaldeans were the Nazi militarists of their day. They inherited all the military weapons of early Sumerians and Babylonians in the Tigris-Euphrates Valley, from 3000 B.C. on to the eighth, seventh, and sixth centuries B.C., when they stamped Israel and Judah.

A graphic list of Chaldean-Babylonian defense items is recorded by the prophet Ezekiel, who went into Captivity at Babylon. He tells of weapons, chariots, wagons, infantry, bucklers, shields, helmets, and gorgeous apparel of the officers (23:12, and 24).

The Jews' great dread of Chaldean might is expressed by Habakkuk, who calls them "that bitter and hasty nation, that march through the breadth of the earth, to possess dwelling places that are not theirs. They are terrible and dreadful. . . . Their horses are swifter than leopards, and are more fierce than the evening wolves; and their horsemen press proudly on; yea, their horsemen come from afar; they fly as an eagle that hasteth to devour . . . they gather captives as the sand" (1:6-9). Habakkuk probably wrote in the sixth century, during the reign of the last Chaldean emperor, Nebuchadnezzar, the Semitic who carried Hebrews into Captivity. However, as Robert H. Pfeiffer points out in his *Introduction to the Old Testament*, when we are sure of the translation of the uncertain word "Chaldeans" in Hab. 1:6, it may develop that this vivid description of the smiting invader refers to the Greek conqueror, Alexander the Great, in the fourth century B.C.

ISLAND WEAPONS

Weapons developed in certain Mediterranean islands, such as Crete, filtered

into the hands of mainland warriors. The Hyksos, for example, promptly adopted them against people of Syria and Egypt. The daggers of Crete were eagerly seized. And the palace of the sea-kings of Crete at Knossos, excavated by Sir Arthur Evans and others, revealed a well-stocked armory. Breasted points out, in *Ancient Times*, that brass armor and hundreds of bronze arrowheads, lists of weapons, armor, and chariots were found in the palace archives of the seafaring conquerors of about 2000 B.C. and later. As Egyptian ships were docking in Crete by 3000 B.C., we may be sure that they carried home with them such weapon patterns as Cretans were designing even by that time. Cretan bowmen were famous. Their shield shaped like a figure 8 was a unique and useful device.

GREEK SPEARS AND NAVIES

Greek arms do not concern us in the scope of this book. It is enough to say that Greeks excelled in use of the spear and operation of their navy, called by Themistocles "wooden walls." Convoys escorted the Aegean fleet into the Black Sea. Her most difficult assignment at sea was to match the thousand Persian ships which came sailing to her shores in 490 B.C.

The forces of Alexander the Great, who left a deep impress upon Graeco-Roman Palestine, were spear-bearing horsemen and phalanxes of heavy-armed, well-trained Greek infantry equipped with metal shields, spears, and helmets.

IN THE ROMAN WORLD OF JESUS AND PAUL

CHARACTERISTIC WEAPONS

Although Roman legions were stationed throughout the land of Jesus, their activities were not as apparent as in some of the other areas under the heel of Rome. Yet Jesus' teachings several times showed an awareness of their occupation. His allusion in the Parable of the Slighted Invitation to armies sent by a king to destroy murderers (Matt. 22) may reflect what he was seeing on highways as he traveled. When prophesying the destruction of Jerusalem

(Luke 21:20), he said, "When ye see Jerusalem compassed with armies, then know that her desolation is at hand." This came to pass in A.D. 70 with her destruction by the army of Titus (illus. 59). That Jesus was not prejudiced against men who, perhaps against their own will, were compelled to join the legions of Rome is shown by his commendation of a Roman centurion whose faith in Christ's ability to heal the sick elicited from Jesus the words, "I have not found so great faith, no, not in Israel" (Luke 7:9).

Of the characteristic long Roman swords, Jesus and his family had occasion more than once to be aware. In fact, when as an infant he was presented in the Temple, Simcon, foretelling Calvary, said to Mary his mother, "A sword shall pierce through thine own soul." And in the Garden of Gethsemane, when Jesus saw Peter seize a sword and strike off the ear of the high priest's servant, he rebuked Peter, "Put up thy sword into its place: for all they that take the sword shall perish with the sword." These words, spoken in Jesus' darkest hour, were followed by his reproach to the mob of Jews and others who came across the Kidron from the city to take part in his arrest, "Are ye come out as against a robber with swords and staves to seize me? I sat daily in the temple teaching, and ye took me not" (Matt. 26:55).

And the long spear of Rome pierced Jesus' side while soldiers gambled at the foot of the cross for the seamless robe which Mary had woven. And "straightway there came out blood and water."

The whole Bible drips with sword-blood, from Genesis through the monarchy, when Saul and Jonathan, defeated at Gilboa, fell on their swords to end their woe. Little wonder that Micah longed for a day when men would "beat their swords into plowshares, and their spears into pruning-hooks; nation shall not lift up sword any more against nation, neither shall they learn war any more (Micah 4:3). . . . Every man shall sit under his vine and under his fig tree; and none shall make them afraid: for the mouth of Jehovah of hosts hath spoken it."

Cavalry was not used in Palestine, according to some authorities, until the ninth century B.C., although it was an important

arm of Assyrian armies who had adopted it from Indo-European people (including the Medes) as early as the twelfth century B.C. We know that Nebuchadnezzar, who took Israel captive, employed cavalry in some of his campaigns. Roman cavalry was prominent in the Palestine of Jesus.

"THE WHOLE ARMOR"

The Apostle Paul had every reason to be aware of the arms of Rome. Far more widely traveled than Jesus, he saw the forces of Roman emperors wherever he went, from Jerusalem through Syria to Damascus, in port cities such as Caesarea and Joppa, throughout the strong city centers of Asia Minor, and on island steppingstones en route to the capital of the Empire at Rome. When ordered by Claudius Lycias to proceed to Caesarea on the coast for trial before the governor, Felix, Paul was escorted by 200 soldiers, 70 horsemen, and 200 spearmen—an evidence of the importance of this Christian prisoner who, as a Roman citizen, was entitled to full protection from the violence of the Jews. The whole company proceeded as far as Antipatris, source of Jerusalem's modern water supply, thirty miles toward the coast from the Holy City. There the soldiers turned back to Jerusalem, leaving the horsemen to escort Paul to Caesarea. Paul had opportunity, too, to become well acquainted with the centurion Julius of the Augustan band, who escorted him by ship to Italy.

Therefore, we are scarcely surprised to read Paul's description of the Christian in terms of a good soldier of Jesus Christ: "take up the whole armor of God, that ye may be able to withstand in the evil day . . . having girded your loins with truth, and having put on the breastplate of righteousness, and having shod your feet with the preparation of the gospel of peace; withal taking up the shield of faith, wherewith ye shall be able to quench all the fiery darts of the evil one. And take the helmet of salvation, and the sword of the Spirit" (Eph. 6:15-17). Paul seems here to summarize all the main weapons of the soldier of his day and to sublimate them to a program of spiritual peace.

Were Jesus and Paul pacifists? There is

much to lead us to believe that they were not entirely so. Once Jesus said that when a strong man was fully armed to guard his goods, his possessions were safe; but when a more fully armed strong man swooped down upon him, and overcame him, that

foe not only seized the man's whole armor in which he trusted, but also his goods which he had stored in his court (Luke 11:21, 22). Paul summarized his life of Christian effort: "I have fought the good fight" (II Tim. 4:7).

ADDITIONAL BIBLE REFERENCES

"Then he called hastily unto the young man his armorbearer, and said, Draw thy sword, and kill me" (Jud. 9:54)

"And they brought every man his tribute . . . raiment, and armor, and spices, horses, and mules, a rate year by year" (I Kings 10:25)

"And he said unto his lad, Run, find now the arrows which I shoot" (I Sam. 20:35-42). See subsequent verses for this famous arrow-story.

"Thou shalt not be afraid . . . nor for the arrow that flieth by day" (Ps. 91:5)

"The archers have sorely grieved him (Joseph). . . . But his bow abode in strength" (Gen. 49:23, 24)

"[Ishmael] became, as he grew up, an archer . . . And he dwelt in the wilderness" (Gen. 21:20, 21)

"And king Solomon made two hundred bucklers [small shields, usually held by a handle] of beaten gold . . . three hundred shields of beaten gold . . . and the king put them in the house of the forest of Lebanon" (I Kings 10:16-18)

"Jonathan stripped himself of the robe that was upon him, and gave it to David, and his apparel, even unto his sword, and to his bow, and to his girdle" (I Sam. 18:4)

"seven hundred men that drew sword" (II Kings 3:26)

"And he killed James the brother of John with the sword" (Acts 12:2)

"the shooters shot at thy servants from off the wall" (II Sam. 11:24)

"Now David was sitting between the two gates: and the watchman went up to the roof of the gate unto the wall" (II Sam. 18:25)

"Jehoash, king of Israel . . . brake down the wall of Jerusalem from the gate of Ephraim unto the corner gate, four hundred cubits" (II Kings 14:13)

"speak not with us in the Jews' language, in the ears of the people that are on the wall" (II Kings 18:26)

"every lofty tower . . . and every fortified wall" (Isa. 2:15)

"I will kindle a fire in the wall of Damascus, and it shall devour the palaces of Ben-hadad" (Jer. 49:27)

"climb the wall like men of war" (Joel 2:7)

"I will send fire on the wall of Gaza, and it shall devour the palaces" (Amos 1:7)

"I will send a fire on the wall of Tyre, and it shall devour the palaces of Bozrah" (Amos 1)

"wisdom is a defense" (Eccles. 7:12)

BIBLIOGRAPHY

Abingdon Bible Commentary, Abingdon-Cokesbury Press, New York.
Albright, William F., *Archaeology and the Religion of Israel*, The Johns Hopkins Press, Baltimore.

- American Schools of Oriental Research, *Annual* No. 1, 14; *Biblical Archaeologist; Bulletin*, No. --, 56, New Haven.
- Breasted, Charles, *Pioneer to the Past*, Charles Scribner's Sons, New York.
- Breasted, James H., *Ancient Records of Egypt*, Vol. I, University of Chicago Press, Chicago.
- , *Ancient Times*, Ginn and Company, New York.
- Burrows, Millar, *What Mean These Stones?* American Schools of Oriental Research, New Haven.
- Conder, C. R., "Jerusalem," *Dictionary of the Bible*, Vol. II, Charles Scribner's Sons, New York.
- Duncan, J. Garrow, *Digging Up Biblical History*, Vol. II, The Macmillan Company, New York.
- Egyptian Museum Guide, Cairo.
- Garstang, John, *The Heritage of Solomon*, William & Norgate, Ltd., London.
- Glueck, Nelson, *The Other Side of the Jordan*, American Schools of Oriental Research, New Haven.
- The Harvard Excavations at Samaria*, Harvard University Press, Cambridge.
- Haverford Symposium on Archaeology and the Bible, American Schools of Oriental Research, New Haven.
- Hanauer, Canon J., *Walks About Jerusalem*, London Society for Promoting Christianity Among the Jews, London.
- Mitchell, H. G., "The Walls of Jerusalem, *Annual*, Vol. I, American Schools of Oriental Research, New Haven.
- Macalister, R. A. S., *A Century of Excavation in Palestine*, Fleming H. Revell Company, New York.
- Marston, Sir Charles, *The Bible Is True*, The Religious Book Club, London.
- Miller, Madeleine S., *Footprints in Palestine*, Fleming H. Revell Company, New York.
- Newbolt, M. R., "Armor," *A Dictionary of Christ and the Gospels*, Charles Scribner's Sons, New York.
- Ordway, Donald, *Sicily, Island of Fire*, Robert M. McBride & Company, New York.
- Petrie, Lady Hilda, *Side Notes on the Bible*, Hutchinson & Co., Ltd., London.
- Pfeiffer, Robert H., *Introduction to the Old Testament*, Harper & Brothers, New York.
- Rowe, Alan, *The Topography and History of Beth-shan*, Vol. 1, The University Press for the University of Pennsylvania Museum.
- Sanford, Eva, *The Mediterranean World in Ancient Times*, The Ronald Press Company, New York.
- Trumper, Victor L., *The Mirror of Egypt*, Marshall, Morgan, and Scott, London.
- Woolley, Sir Leonard, *The Development of Sumerian Art*, Charles Scribner's Sons, New York.
- , *Ur of the Chaldees*, Charles Scribner's Sons, New York.
- Woolley, Sir Leonard, *Ur Excavations*, Vol. II, *The Royal Cemetery*, The Carnegie Corporation of New York, for the University of Pennsylvania and the British Museum.

FLOWERS, HERBS, TREES, AND OTHER PLANTS

He causeth the grass to grow for the cattle,
And herb for the service of man.

—Ps. 104:14

Introduction

Flowers

Palestine's Prolific Blossoms

Varieties

Anemone, Daisy, Asphodel, Crocus,
Cyclamen, Gladiolus, Narcissus, Hyacinth,
Lily, Rose, Salvia, Larkspur,
Loosestrife, Mallows, Marigold, Jasmine,
Squill, Flax, Star of Bethlehem

In Other Bible Lands

The "Land Beyond the River"

Egypt

Greece

Treasures in Herbs

A Royal Kitchen Garden

Anise, Cane, Coriander, Cummin, Hysop,
Licorice, Mandrake, Mint, Mustard,
Rue, Saffron, Wormwood

Perfume Spices

Sacred Incense

Holy Anointing Oil

Other Spicy Perfumes and Unguents

Trees

In the Lives of People of Bible Lands

Foreboding and Joy-bringing Trees

Traits of Trees

Varieties

Evergreens

Fruits and Nut Trees

Sacred Trees

Stream-loving Trees

Reeds and Rushes

Thorns, Thistles, and Briers

Monarchs of the Forest

Wilderness Varieties

Trees in Other Bible Lands than Palestine

Assyria, Babylonia, Egypt, Greece, Mediterranean Islands, Syria

Wisdom of Trees

Daniel's Dream, Jotham's Fable, Jesus' Parables

Additional Bible References

Bibliography

INTRODUCTION

"THE GLORY OF THE PALESTINIAN SPRINGTIME"

Jesus loved God's open spaces. Spring to him as a boy meant the return of nights warm enough for sleeping under silver stars. Spring to him meant roaming flower-carpeted hills to gather blossoms for his toiling mother. Jesus felt as sorrowful as any other lad when the quick season of delicate flowers was over.

Spring to Jesus the man meant a season when children of Galilee brought him handfuls of meadow flowers, asking their names. Flowers he used as themes for his mountainside teaching when he called attention to the "lilies of the field" that

neither toil nor spin (Matt. 6:28), yet contribute so much beauty to the world. Jesus wanted his hearers to be as free from feverish anxiety as these thriving little flowers.

Viscount Allenby, deliverer of Palestine twenty centuries after Jesus, once wrote us how he felt about this fascinating country. His words might also be applied to the experience of Jesus: "I knew the bitter cold of winter in the Judæan hills; I saw the glory of the Palestinian springtime; I felt the burning heat of arid summer on the plains; and looking back, all my memories are good."

The darkest months of the year in Bible lands are December and January. People withdraw into their homes and ply their domestic arts and crafts. From October to

April come the rains. In November and December fall what the Bible calls "the former rains," soaking the thirsty hills with rough storms. But by February, sunshine begins to race with clouds, so that the Arabs say, "It storms and blusters but begins to smell like summer." February and March bring heavy showers known as "the latter rains." By this time the hills are tapestried with a glory of brilliant blossoms and new grass.

Little wonder that such poetic prophets as Isaiah, who lived on the edge of the barren Judæan Desert at Jerusalem, broke into singing in the spring, "The wilderness and the dry land shall be glad; and the desert shall rejoice . . . even with joy and singing" (35:1, 2).

FLOWERS

PALESTINE'S PROLIFIC BLOSSOMS

Spring in Bible lands comes with a burst as sudden as the rise of the sun over the blue-green Sea of Galilee, as it shoots out fingers of gold under grey dawn-clouds, or as it climbs up from the deep Jordan Valley, lighting the ivory walls of the Holy City and the silver olives on the hill that Jesus loved. A spring-loving poet of Bible lands, who wrote in the vine-growing villages of northern Galilee, said:

For lo, the winter is past;
The rain is over and gone;
The flowers appear on the earth;
The time of the singing of birds is come,
And the voice of the turtle-dove is heard
in our land.
The fig-tree ripeneth her green figs,
And the vines are in blossom;
They give forth their fragrance.

—Song of Sol. 2:11

The greatest plant catalogue in Scripture is found in the Song of Solomon. The author, working without even an herbal, makes more than seventy-four references to various plants, although his identification of them is not satisfactory to the modern botanist. With an exotically beautiful perfume, flowers move across the pages of these eight short chapters—apple blossoms, which really are apricot blooms; henna flowers; lilies; banks of sweet herbs; and beds of spices, all set in pomegranate

orchards, vineyards, and palm groves. This "herbarium" corresponds to the jewel list of Ezekiel or the animal catalogue of Job.

One botanist believes there are 400 varieties of Palestinian and Syrian desert flowers not found elsewhere. Many flowers of Transjordan have never yet been classified. More varieties of spring flowers bloom in a given area of Palestine than almost anywhere else in the world. We are grateful to Harold Moldenke of the New York Botanical Garden; and to Elcanor A. King, author of *Bible Plans for American Gardens*, for widening our pleasant acquaintance with trees and flowers we have seen flourishing in Bible lands.

VARIETIES

In view of the quantity of wildflowers in Palestinian spring landscapes, it is strange that so few references to these found their way into Scripture. There are fewer allusions to wildflowers than to trees. When Jesus paid his lovely compliment to the "lilies of the field," he probably referred to all spring flowers. At least, the Arabs, when they speak of *sushan* or *hannum*, mean, as Grace M. Crowfoot indicates, "a beautiful wild flower." The term includes anemone, daisy, tulip, cyclamen, star of Bethlehem, and all the others. Or Jesus may have been thinking of the anemone specifically.

The anemone, or wind flower (*Ranuncula* or *Anemone coronaria*), related to the buttercup family, grows in all parts of Palestine in brilliant reds or delicate pinks, purple, white, blue, and cream. There are acres of these on the plain along the Sea of Galilee, and acres more on the blood-drenched Plain of Esdraelon below Nazareth. This poppy-like "queen of the meadows," to which Jesus referred as being more gayly attired than "Solomon in all his glory," shares the deep red of royal robes. Blue anemones are prevalent near Jaffa; white, in sections of the plains of Sharon and Galilee.

Eminent botanists today disagree about the "lily of the field." Ha-Reubeni and his expert wife, founders of the Museum of Biblical Botany at the Hebrew University in Jerusalem, think it was the *ahib leban*, or "white flower," a modest blossom

much more in keeping with Jesus' reference, "and yet I say unto you." In fact, this Jewish authority identifies the "lily of the field" with the common white daisy, which is beautiful even when withered and ready to be "cast into the oven." Grace Crowfoot, wife of the British archaeologist, says in *From Cedar to Hyssop* that she has seen, against the glistening background of the Lake of Galilee, ranks of asphodels which are for her the "lilies of the field." The Arab fellahin (farmers) who live now where Jesus taught believe he was referring to the scarlet anemone. So, too, thought Canon Tristram.

The crocus of the plain (called by Hebrews *halaz-zeleth*) was sometimes identified as the "rose of Sharon" (illus. 118). So, too, was the fragrant yellow or white narcissus, or red tulip. Some botanists think that the "rose of Sharon" was a true rose, though others claim it was bulbous and not a rose plant at all; still others, that it was an oleander or rock rose, although the two latter seem to us unlikely. Ha-Reubeni thinks that the "rose of Sharon" was a *Tulipa montana* or *Praecox*, one of the oldest members of the very ancient family of tulips—whose name comes from the Persian word for "turban."

The crocus of the plain is content to sleep under the dry soil in the hot months. But with showers it sends its thick stem up and gets ready to bear a gay, waxy yellow flower. From the saffron crocus, fragrant and sweet, a substance liked by Palestinians for medicine and flavoring of food is extracted and made into saffron cakes sold in the bazaars.

The cyclamen with its petals neatly turned back is poisonous to fish, stupefying them.

Gladioli in Palestine belong to the iris family. They are called "sword lilies." This is because they, curving on their spiky stem, resemble an eastern scimitar. From five to seven pink or dark purple flowers grow along one side of the short stem, not on both sides as in western *gladioli*. In spring they tower above young corn fields, adding rich color to the scene. Other iris flowers crowd the moist places in early spring.

The white and yellow narcissus, growing in the plain along the Mediterranean,

may have been the "rose of Sharon" (Song of Sol. 2:1). Natives are fond of this fragrant flower and wear it in their clothing. They place it in earthen vases in their homes. They like, too, the blue, bell-shaped flowers of the hyacinth, blooming from February to April on Mount Carmel and near Sidon. The grape hyacinth grows everywhere and the single blue oriental hyacinth has many cousins.

There are many varieties of the graceful lily in Palestine. Some, still growing in the marshy Lake of Huleh in northern Galilee, closely resemble the Egyptian lotus (illus. 117). The madonna lily, frequent in Christian art symbolism, was not introduced until after the time of Christ. Perhaps the jonquil was called a "lily" by Solomon's gardener.

Roses of many varieties have always grown in Bible lands. Among rocks; along border paths in gardens gracing pools; in pots on flat roofs of peasant homes; or in acres (damask roses) cultivated for attar of roses, perfume, and candy flavoring, all add their joy to the landscape. Some types of flowers called "roses" are bulbous.

Salvia has been suggested by Elcanor A. King and others as the source of the design for the seven-branched golden candlestick. Almond-blossom calyxes were the models for the cups of this famous lamp (Ex. 37:17ff.), just as the calyx of pomegranate flowers suggested ancient crowns.

Spring's flowers leave Palestine as suddenly as they come. The lavish beauty of April is over by May. Harvests rush up and crowd them out. Scorching sun withers them.

The shortness of spring led an ancient Hebrew writer to say,

As for man, his days are as grass.
As a flower of the field, so he flourisheth.
—Ps. 103:15

Jesus spoke about the new grass of the field, "which today is, and tomorrow is cast into the oven" (Matt. 6:30).

Other gay flowers adding to the "glory of the Palestinian springtime" are larkspur (*delphinium*); loosestrife, with its gay purple cluster; marsh-loving mallows; marigolds, jasmine, blue squill, and pink flax. The star of Bethlehem, with its six delicate

white petals opening wide at noon into a six-pointed star, bore in Bible times the unlovely name of "dove's dung" (II Kings 6:24, 25).

Flowers of the Jordan Valley, and especially its jungles of *Tamarix jordanis* with their feathery branches and pinky-white flowers, are beautifully described by R. J. E. Boggis in *Down the Jordan in a Canoe*. Papyrus stems on the shores of Lake Huleh grow to a height of 15 ft., ending in tufted knops of hairy streamers 18 in. long. He pictures reed-grass sometimes 20 ft. tall, "shaken with the wind," as described in Matt. 11:7. He delights in camping sites along the Jordan, sheltered by poplars, lotus trees, Christ's "thorn apple," oil plants, henna, capers, mallows, Dead Sea fruit (*Poma sodomitica*), mimosa, lavender, and willows.

In Transjordan, east of the Jordan, spring lays a wonderful carpet of flowers as early as February. All sorts of Palestinian wildflowers greet newborn lambs and goats.

IN OTHER BIBLE LANDS

THE "LAND BEYOND THE RIVER"

Flat, muddy Babylonia in its lower reaches did not produce native flowers. But in the high steppe or prairie between the Tigris and the upper loop of the Euphrates a blaze of gay spring wildflowers carpeted the meager, stony soil of this country which was too arid for crops.

EGYPT

The Egyptian garden-god, "Pan," was Min.

Egyptian gardens surrounding villas of wealthy nobles have given us the finest examples of luxurious and aesthetic standards of living in ancient Bible times. From bas-reliefs we know how the home, with its papyrus columns, its porticoes, its courts where the pet dog played, and its slaves dipping up water from a central pool to refresh the plants and trees, all looked. Tuthmosis III, the great Eighteenth Dynasty conqueror of Palestine and Syria, had in his palace at Karnak a botanical garden in which he displayed proudly plants and animals imported from his conquests. Just as the mosaics recovered from

the Church of the Multiplying at Tabgha, Galilee, suggest the reeds, lilies, lowland plants, and animals which lived in the time of Jesus, so these ancient Egyptian bas-reliefs give us our only clues to the flora and fauna of the period. We have seen in the fourth century mosaics of Constantine, in the floor of the Basilica of the Nativity at Bethlehem, plants and fruits of his period.

But the one flower par excellence given by Egypt to the world is the water lily—*Nymphaea alba*, *Nymphaea cerulaea*, and *Nymphaea lotus* (illus. 117). Abundant in plains fertilized by Nile floods, the *Nymphaea* was prolific in warm upper Egypt. It was entwined with the papyrus of lower Egypt to form the emblem of the united Egypt.

The piquant white lotus, opening only at night, was a favorite accessory at Egyptian banquets, where servants several times during the evening brought in fresh buds for the ladies to hold or to wear in their hair. Yet it was also food for the poor; its seeds and roots could be ground into flour, and its potato-like tubers were valued for starch. One botanist suggests that the biblical phrase, "Cast your bread upon the waters," came from the Egyptian custom of embedding "bread seeds" in clay balls and tossing them onto water to germinate plants for more bread. The blue lotus, opening in daylight, was more commonly depicted and was prized for its sweet fragrance.

The Egyptian water lily soon found its way into art. It gave the lotus motif to one of the earliest column capitals in history, dating from the Fifth Dynasty, as Sir Flinders Petrie pointed out. This charming Early Dynastic capital, at Saqqarah Temple, was the ancestor of the Greek Ionic which did not develop for another 800 years from the curving calyx of the water lily. Writing in *Ancient Egypt*, Petrie stated that the lotus has been more influential in art than any other flower, from prehistoric times down to the Eighteenth Dynasty, when the finest lily cups of glazed faience and brilliant jewelry using bud, leaf, and stems in decorative splendor appeared. Egyptians got their fundamental idea of beauty from the natural curves of the lotus plant, from which almost all subsequent artistic forms

have developed. "The land of the lotus" was the birthplace of the world's best ornament.

The lotus influenced not only Egyptian but Palestinian art. For in the Temple of Solomon at Jerusalem, the lily work was conspicuous: "the capitals that were upon the top of the pillars in the porch were of lily work, four cubits . . . And upon the top of the pillars was lily-work . . . and the brim [of the molten sea] was wrought like the brim of a cup, like the flower of a lily" (I Kings 7:19, 22, 26). If metalworkers from Phoenician Tyre executed the craftsmanship, the designs came from Egypt.

In religion as well as in art Egyptians stylized their water lily. It denoted eternal youth and was associated with the gods Ra and Horus. Dandies delighted to wear lotus amulets or to own charming little bronzes of young Horus, sitting on a white lotus, surrounded by blue lotus blooms. Thrones bore carved pictures of Isis, holding a lotus, symbol of resurrection or of life in the underworld.

Job referred to lying

"under the lotus trees,
In the covert of the reed"

(40:21), and to lotus trees shading a person amid brook-willows.

GREECE

Many beautiful Greek myths give us clues about flowers. In the story of Europa and the bull, we find meadows of yellow crocus, narcissus, hyacinth, violet, red roses, and thyme. The narcissus, as Ovid relates in his *Metamorphoses*, took its name from the handsome Greek youth, Narcissus, son of the river-god Cephissus, who was so in love with his own beauty, reflected in the water, that he pined away. In his stead, a flower sprang up, to return each spring. The basis of the Greek mystery religion, which Paul knew to be celebrated at Eleusis, embodied the spring-time flower-picking of Persephone. The maiden was gathering lilies and violets when Pluto carried her off to the underworld, to the sorrow of her mother, Ceres, goddess of grain. Sleep-producing poppies were sacred to Ceres. And asphodel, a

genus of the lily family growing in many Mediterranean regions, was the most famous of plants connected with Pluto's realm. Homer, Pliny, Lucian, and many other ancient writers referred to asphodel, which formed the garland of Persephone in the underworld.

TREASURES IN HERBS

Hezekiah, King of Judah, measured his valuables in spices and precious oil, as well as in armor, silver, and gold (II Kings 20:13).

A ROYAL KITCHEN GARDEN

Herb gardens were essential to every king's domestic setup. Solomon's, near Artas south of Bethlehem, provided him with all the chief spices for his table. This supply was supplemented with imports brought by the Queen of Sheba from Arabia and by his merchant traders. Perfume-providing plants he had his gardeners cultivate especially.

King Ahab of Israel went in for herb-gardening in a tragically serious way. He became avid enough to allow his wife, Jezebel, to arrange the murder of his neighbor Naboth, so that he could make this man's vineyard into an herb annex for his palace garden (I Kings 21).

The Bible is rich in allusions to herbs and spicy plants used for culinary, medicinal, prophylactic, cosmetic, and worship purposes. To discuss them thoroughly here is impractical. We suggest consultation of some of the specialized books mentioned at the end of this chapter. You may brush up on herbs of the Bible by planting a Bible herb garden, as Vassar College has planted a Shakespeare Garden. The New York Botanical Garden has arranged exhibits of living Bible plants which have enlightened and delighted thousands of Americans.

Anise was dill, used for making sour condiments and for seasoning cakes. Sometimes these seeds grew wild. Certainly, Jesus regarded them as inconsequential, for he reduced to the absurd their tithing by Pharisees who neglected "weightier matters of the law" (Matt. 23:23). Anise be-

longs to the parsley family and grows 20 to 30 in. high. It is hung up to dry in small bunches.

Cane, which may be *calamus*, mentioned by Jeremiah (6:20), may also be our sugar-cane.

Coriander seeds, to which manna was compared (Num. 11:7), came from an annual plant of the parsley family, growing wild all over Palestine and prized for condiments, sausage, and soup. Shall we accept Jarvis' interesting theory that the providentially provided manna was the deposit, similar to coriander seed, dropped by birds who had fed on tamarisk trees (see p. 213)?

Cummin is a wild plant, with evil-tasting seeds which look like caraway and have digestive value. It was classed by the author of Matthew with mint and anise. It resembles fennel. Its seeds are beaten out with a stick for spice and medicine.

Hyssop was used by the Children of Israel on the night of their departure from Egyptian bondage to smear blood of sacrificed animals on their doorposts (Ex. 12:22). It may have been, says Eleanor A. King in *Bible Plants for American Gardens*, either marjoram, or caper, which grows plentifully in desert sections, or sorghum grass. Mary Crowfoot, in *From Cedar to Hyssop* points out that Solomon must have considered hyssop at the opposite end of the world of vegetation from the stately cedar (I Kings 4:33). She suggests possible identification with thyme or marjoram. More interesting perhaps than its identity is its use in Bible history, as in treatment of lepers (Lev. 14:4, 6). This same cleansing property is reflected in Ps. 51:7:

Purify me with hyssop, and I shall be clean.

Containing thymol and carvacrol, it is a powerful antiseptic. The hyssop given to Christ at his crucifixion brought him not only vinegar to moisten his lips but, if hyssop was marjoram, a stimulating fragrance.

Licorice, still used for the favorite drink peddled through Palestine streets in brass-trimmed "fountains," was made from aromatic roots.

Mandrake root had a cultic significance, as indicated at Ugarit. Introduced in the

Rachel-Leah story of Gen. 30:14, it was valued as a "cure for barrenness."

Mint, used as seasoning by many ancient peoples, was *Mentha savita* of our own herb gardens. Jesus used it to express inconsequential scruples (Luke 11:42).

Mustard of the parable of Jesus (Mark 4:31-32) is the yellow-flowering herb we know, black mustard, growing wild in fields. It occasionally grows 12 ft. high. Perhaps Jesus for purposes of clear teaching exaggerated its growing powers, as he exaggerated the size of the needle eye through which the theoretical camel passed.

Rue was the garden-border variety we know to have medicinal properties. Luke refers to Pharisees' tithing rue (11:42).

Salt, as seasoning and preservative, we shall discuss under Nutrition, page 314.

Saffron, obtained from crocus, was useful for seasoning as well as dyes. Farm wives collect the styles and stigmas, dry them, pound them in mortars, and make them into cakes to sell at *sûks*.

Wormwood is believed to have belonged to the *Artemisia* family, bitter in its properties. Bethlehem women gather it in desert stretches nowadays.

PERFUME SPICES

Easterners have always loved perfumes and cosmetics for their beauty as well as their prophylactic properties. "Perfumer" and "apothecary" are both translations of the same word. Fortunes were built up on them by the frankincense trade routes of the ancient East.

Moses and the Israelites he delivered from Egypt had not lived among the ancient bazaars without cultivating a penchant for the perfumes, unguents, and incense used in this land of luxury. Those of us who knew the Muski bazaar of old Cairo before its recent destruction have had a whiff of that exotic atmosphere.

An extremely fine portrayal of Egyptian love of perfumery is seen in the carved back of the chair of Tut-ankh-amun in the Cairo Museum. The dainty little queen is seen touching the shoulder of the young king with the choicest perfume of his realm (illus. 52).

Amazing art survives in many a toilet

set from boudoirs of now dusty queens, beginning with Queen Shub-ad of Ur before the third millennium B.C. The University Museum at Philadelphia is rich in examples.

When invaders threatened a land of the Bible, citizens feared lest their daughters be carried off to become perfumers, bakers, and cooks (I Sam. 8:13).

SACRED INCENSE

We are a bit surprised that when Moses was preparing the laws for Israel to follow in her worship, he gave a definite formula for the incense to be used exclusively at the tent of meeting and never for personal adornment. It reads:

"Take . . . sweet spices, stacte, and onycha, and galbanum; sweet spices with pure frankincense: of each there shall be a like weight; and thou shalt make of it an incense, a perfume after the art of the perfumer, seasoned with salt . . . and thou shalt beat some of it very small" (Ex. 30:34-36).

Moses had learned "the wisdom of the Egyptians" in the matter of grinding spices and distilling sweet perfumes. The tools for this art have been found by archaeologists.

Stacte was *opobalsamum*, possibly storax, a gum resin exuded from the storax tree or shrub plentiful still in Palestine and highly fragrant.

Onycha was a sweet spice thought by some to be related to sweet, soothing benzoin.

Galbanum was a brown-yellow resin exuded from a carrot-like plant found in Syria, Arabia, Persia and India. It had a fragrance like balsam.

For frankincense, see p. 363.

HOLY ANOINTING OIL

The "chief spices" listed in Ex. 30:22-25 for "holy anointing oil" to be used on tabernacle equipment are discussed below:

Flowering myrrh was made from aromatic resin exuded from a shrubby balsam grown in Arabian Yeman deserts or from Palestinian and Syrian rock roses. Myrrh, mingled with wine, was used as an anodyne to appease the pain of Jesus on

his cross (Mark 15:22). And to his garden tomb, the rich Sanhedrin member, Nicodemus, brought "a mixture of myrrh and aloes, about a hundred pounds," to be used in preparing the body of Jesus for burial, "bound . . . in linen cloths with the spices, as the custom of the Jews is to bury" (John 19:39, 40).

Myrrh trees of "Punt" in East Africa grew on terraces. In the midst of these groves the natives built their huts, which astonished sailors of Queen Hatshepsut's expedition from Egypt in the fifteenth century B.C.

Sweet cinnamon was derived from bark of the cinnamon tree known in Palestine of Solomon's time and in Babylonia. A tree must be four or five years old before its bark may be stripped for spices.

Calamus, of the flag family, grows in damp places where iris thrives.

Cassia is an inferior cinnamon whose bark peels off in little tubes, like the stick cinnamon we use in kitchens today.

Use of these anointing oils is seen in the ministry of Elisha. For example, he sent a subprophet with a vial of oil to Ramoth-gilead to anoint the head of Jehu, saying that Jehovah had anointed him king over Israel (II Kings 9:3). And in the story of Joash, Jehoida the priest, with warriors standing about the altar at Jerusalem, "brought out the king's son, and put the crown upon him . . . and anointed him" (II Kings 11, 12).

OTHER SPICY PERFUMES AND UNGUENTS

Aloe, derived possibly from the gum of "the eagle tree" of India and blended with myrrh and cinnamon, was used to perfume couches (Prov. 7:17) and to make fragrant the robes of royalty (Ps. 45:8). Such imagery figures in the familiar hymn, "Ivory Palaces." Aloes is sometimes identified with Indian sandalwood.

Spikenard, also called "Syrian nard," was a prized ingredient of unguents. It may have been gotten from an herb, grown, as Eleanor A. King suggests, in high pasture land of the Himalayas. This distant source would explain the extravagance criticized by Judas, when Mary anointed at the Bethany supper the weary feet of

her Lord (John 12:3-9). Sometimes spikenard is combined with henna or camphire, a fragrant shrub from whose yellow flowers the favorite dyestuff of finger- and toenails has been made for centuries.

TREES

Then shall all the trees of the wood sing
for joy
Before Jehovah.

—Ps. 96:12

Trees give the optimistic keynote to the message of the Bible,

"For there is hope of a tree,
If it be cut down, that it will sprout
again"

—Job. 14:7

This wisdom-writer did not believe there was as much hope for a man as for a tree. But his pessimism was checkmated by the resurrection of Jesus.

IN THE LIVES OF PEOPLE OF BIBLE LANDS

The opening pages of Genesis are like a glimpse into a Mesopotamian garden, with trees shading goodly walks along a cloud-reflecting pool. And at the center of that eastern garden is the pattern of a tree of life, as may be seen in a flowery rug of old Shiraz today. From oasis to oasis, alternating with wilderness wastes, the story of man's spirit unfolds until it leads to an olive orchard outside Jerusalem on Good Friday and climaxes in the fragrant garden of Joseph of Arimathea on Easter morning. A majestic epilogue of fruit trees is envisioned by John of Patmos.

The dry tree, the green tree, the short tree, and the tall all play their role in the saga of trees in Bible life. Hundreds of references to trees adorn pages of the Scriptures. There are many more allusions than to flowers, although these frail and lovely creatures are in springtime a more conspicuous feature of Palestinian landscape than trees. In Old Testament times, as early as Abram's arrival in Canaan, forests enlivened the hilly slopes. Some remained as late as Crusader centuries. Stumps of these are still seen in stratigraphic layers. It is a credit to twentieth-

century forestation projects of the British Mandate of Palestine and of Zionist colonists that new, young forests are on their way below hilly Nazareth, where Jesus played, and in many other sections, south toward Hebron. Aleppo pine, acacia, willow, cypress, eucalyptus, olive, poplar, pistachio, tamarisk and many citrus trees are being cultivated.

The Jewish National Fund has planted more than 3,000,000 trees in Palestine to date. Its program provides trees of life for denuded slopes, shade in public parks at Haifa and elsewhere, nurseries for saplings at En Ha 'Shophet. These are vital factors in soil conservation, improvement of climate, and extension of habitable areas for Eretz Israel.

On the edge of Nazareth we have seen flourishing young groves getting a good start. The George Washington Forest at Kfar Ha 'Chores is a worthy effort. So, too, is the Brandeis Forest planted in honor of the American jurist, by the Hadassah, the Women's Zionist Organization of America.

Young workers go out to plant trees fraught with new hope for homeless Jews of terrorized ghettos. They sing joyously this significant song, reminiscent of the songs sung in Old Testament times on the land:

Now we come into our land
We shall plant;
On hill, in vale, at ocean strand,
Spreading forests greening stand;
We shall plant.
In ancient times, at birth of child,
They did plant;
Cypress dark and cedar wild,
Carobs broad and olives mild
They did plant.
Our nation now is born anew,
So we plant;
On wastes of sand which deserts blew,
In deadly swamps of somber hue
There we plant.

The Transjordan government has planted fine forests in that ancient land over the river.

FOREBODING AND JOY-BRINGING TREES

Dark and foreboding trees played a role in lives of Bible people. A Deuteronomic law provided that if a capital crime

be committed, the criminal be hanged on a tree and his body buried quickly lest it contaminate the earth (Deut. 21:22). Upon a tree Joshua hanged the king of Ai, after he had captured that city. The conqueror let the body dangle until sunset, when he cast it at the gate and raised a heap of stones over it (Josh. 8:29). In a great oak tree Prince Absalom's "two hundred shekels' weight" of hair entangled him fatally, leaving him suspended between heaven and earth while his mule rode on without him (II Sam. 18:9, 10). We have enjoyed wonderful wall mosaics in the Capella Reale of Palermo depicting this dramatic incident. On a tree of unnamed variety, possibly on what persists in Palestine today as the "Judas tree," remorseful Judas hanged himself. Some legends associate his hanging with a fig tree.

On another unidentified tree came the glorious redemption of Judas' betrayal: Jesus they also slew, hanging him upon a tree. And as he agonized there, "he bare our sins in his body upon the tree" (I Pet. 2:24).

Yet to people of Bible lands trees were happy treasures, many of them venerated as sacred (see Sacred Trees, below). To raise a family under one's own fig tree was sum total of domestic joy.

Upon their return from Captivity in Babylon, Hebrews at Jerusalem, under Nehemiah the governor and his staff of priests, renewed their ancient custom of giving to Jehovah "the fruit of all manner of trees" (Neh. 10:37), together with the "first-fruits of . . . dough . . . the new wine and the oil." Levites collected such tithes "in all the cities" of Hebrew tillage. This ancient custom of tithing field produce for God's work has persisted picturesquely down the Christian centuries, as we have seen in a medieval tithe barn in British Glastonbury in connection with an abbey.

TRAITS OF TREES

Every wild tree was a "tree of the Lord." Only fruit trees were deemed worth domestic cultivation. Planters were willing, as Christ indicated in his parable, to "dig about and dung" trees for as much as

three or four years, and if they then proved unfruitful, they could be cut down and burned.

Trees were known by their fruits. They were expected to be productive. Many trees supplied homes for birds (Ps. 104:17). Willows furnished coveted noontime rest shade. Isaiah prophesied that trees would clap their hands for joy, in worship of Jehovah, and that firs and fragrant myrtles would push thorns and briars from the desert. Jeremiah tried to divert his hearers from trees dedicated to the worship of lewd Asherim, in groves such as those at Byblos and Antioch in western Syria (Jer. 17:2). The unscrupulous Judaeen King Ahaz desecrated trees not only by making them into images but also by burning incense "under every green tree" (II Chron. 28:4). Ezekiel found faithless people still worshipping under "every thick oak" (6:13).

A tall palm symbolized a man of integrity.

The destruction of domesticated trees, either by locusts (Joel 1:12) or war, was woe indeed. The degeneration of a garden into a forest of wild trees where beasts roamed was irony. So precious were trees in the sun-baked soil of ancient Palestine and Syria, that in the day of Naaman olive yards were units of payment for services rendered (II Kings 5:26). Yet little was done to prevent goats from destroying young forests.

VARIETIES

Modern botanists recognize an unusually large variety of trees in Palestine because of six climatic regions of this small area: the torrid Dead Sea rift, lowest section of the earth's surface; the mountainous region intersecting this depression, east and west; the high summits, such as the Lebanon Ranges; the plateaus of Damascus and the Hauran; deserts extending as far as the Sinai Peninsula; and the fertile Maritime Plain. There are about 124 orders, 850 genera, and 3,500 species of plants in these six botanical regions. Many have not yet been classified, especially those in Transjordan, of whose eastern highlands we know little in comparison with western Palestine.



7. The Egyptian lotus (*Nymphaea*) has exerted at influence on column capitals.



118. Palestinian-grown rose of Sharon, resembling a species of narcissus (Song of Sol. 2:1). (Matson Photo Service, Jerusalem)

119. "Seven-branched Candlestick" in a grove of 400 cedars of Lebanon, 6,000 ft. above the Mediterranean at Bsherrah overlooking Qadisha Valley, sole survivors of the ancient forest. Ancestors of these trees were valued by kings, prophets, and poets (Judg. 9:15; I Kings 5:6).





120. Slender cypress trees guard the approach to the Dome of the Rock built by Khalif 'Abd el-Melek in the seventh century A.D. over the sacred Rock Moriah. The Temples of Solomon and of Herod stood on this site.

121. Sycamore tree near Heliopolis Egypt, where, according to fanciful tradition, the Holy Family rested during their flight.



122. Palm with cluster of dates, in Jeric Oasis.



Large-leaved fig tree in Cana of
lee.



124. Gnarled olive tree in the Franciscan
Garden of Gethsemane, a veteran of many
centuries (Mark 14:32). Window of the
basilica is in the background.

Harold Moldenke has condensed into a valuable pamphlet hundreds of references to Bible plants and descriptions of some 150 species which he attempts to classify in the light of modern botanical research—an admirable piece of work.

Just as jewels of the Old Testament have been inaccurately identified because neither writers of Scripture nor their translators were lapidaries, so it is with plants. Authors of the Bible were not botanists. Controversies are still raging. The apple of Eden proves to be the apricot, abundant in Syria today. The prickly pear so conspicuous in hedges at Nazareth today, for instance, is a recent immigrant. Most contested of all is the hyssop, of which Palestine has several varieties. The oak and the terebinth need to have their relationship ironed out, for, although unrelated, they resemble each other.

EVERGREENS

Balm of Gilead, or balsam (Jer. 8:22), which exuded a coveted sap, was not native to Gilead but grew plentifully in Arabia, under the name *balsamodendrum*, as Eleanor King points out. Balm was also furnished by the mastic tree (*Pistacia lentiscus*), whose resinous sap trickles from slashes cut in its bark and is an ingredient of varnish. The mastic does grow in Gilead. Its balm was in the cargo of the caravan of Ishmaelites "coming from Gilead with their camels bearing spicery . . . to carry it down to Egypt," when they annexed young Joseph to their company on Dothan Plain "for twenty pieces of silver" (Gen. 37:28). Here is a strange fore-jingle of the tragic thirty pieces of silver for which Judas sold Jesus (Matt. 26:15).

Another variety of balsam furnished myrrh.

The bay tree, David's symbol of wicked people who appear prosperous and influential, is the *Laurus nobilis*, an evergreen flourishing from April to June on slopes of Tabor and Carmel. Its aromatic leaves flavor many a dainty food, and its roots and bark supply medicine.

The box tree (*Buxus*), twice mentioned by Isaiah, attains a height of 20 ft. in northern Palestine and Lebanon.

The cedar of Lebanon, most sacred of Bible trees, is chief among evergreens in Scripture (illus. 119). A climb to Bsherrah's small grove of 400 trees, some of which must be 2,000 or more years old, remains a high point in the authors' nine seasons of Mediterranean travel. The *Cedrus libani* monarchs, rising some 6,000 ft. abruptly up the Qadisha Valley from the sea, remain a precious link between Solomon and Hiram's time and our own. Here we see trees like those shipped by the cedar-monopolist Phoenician king to the Hebrew king building at Jerusalem. Americans saw sections of cedar wood from Lebanon at the World's Fair of 1938-39 in the remarkable pavilion of the young Republic of Lebanon, whose flag and stamp carry its ancient cedar-tree emblem.

The very name of the Lebanon cedars, *arz-el-rabb*, means "strength" or "value." Natives call them "trees of God." Fed by snows of the majestic Lebanon Mountains, growing strong in fighting terrific gales, the cedars live for centuries. Twelve are especially famous; among this number are the "Sentinel" and the "Seven-branched Candlestick." We have seen water springing up inside the trunk of one cedar, as if in fulfillment of the words of the Psalmist: "The trees of Jehovah are filled with moisture" (Ps. 104:16). Because their wood seems never to rot, they were cut in vast quantities by Hiram, King of ancient Tyre, and floated down the sea for King Solomon to use in constructing his "house of cedar" (1 Kings 5:6, 9) and the great Temple at Jerusalem. The poet-prophet of Israel, Isaiah, spoke of "tall cedars," the "glory of Lebanon." Palaces in Egypt and Palestine, boats, musical instruments, pillars, gods, coffins were made of precious cedar wood. A medicine for skin diseases, Quatrum Tannub, is made from cedar sap in a small Lebanon hamlet. The bark of the cedar is coarse and rough, of a beautiful brown. The trees grow very slowly to a great height. They are recognized by their horizontal branches bearing needles $\frac{1}{2}$ in. long and by handsome tan cones rising from the twigs. The bright-green needles, like spruce needles, are $1\frac{1}{2}$ in. long. The cones are 3 or 4 in. long and very fragrant. Some of these are in our

study as we write these words. Cedars of Lebanon may measure 40 ft. around the trunk. Sometimes a cluster of trunks rises from one set of roots, giving the effect of a seven-branched candlestick. If boughs of a live tree touch those of a dying cedar, they sometimes grow into their neighbor's branches and sustain them with new life by nature's own system of grafting.

Folk festivals of worship held among the cedars annually by Maronite Christians who maintain a tiny chapel there are "in honor of no saint, but of God himself," who created these holy trees.

For details about impressions of these matchless cedars, see our *Cruising the Mediterranean*, pages 178-182.

The cypress (*Cupressus sempervirens*) contributed great forests to mountains of ancient Palestine (sometimes called "gopher-wood groves"). Cypress was used for ships and idols because of its durability. The Apocryphal Book of Ecclesiasticus refers to the cypress as "growing high among the clouds" (50:10). "Cypress" and "cedar" are two translations of the same Hebrew word, as we see in the Isa. 44:14 of the Revised and the King James versions.

We have been awed by ancient cypresses growing near the west entrance to the Dome of the Rock, on the site of Solomon's Temple (illus. 120), and by newer plantings of pencil-cypresses in the Russian Garden of Gethsemane. These trees abound in the landscaping of the new Palestine Archaeological Museum in Jerusalem, among ancient tombs in the Athenian Kerameikos, and along the Appian Way by which Paul trudged to Rome between massive mausoleums of men in stone.

Firs or pines (Hos. 14:8) appear in various parts of Palestine. We have enjoyed the shade of one modern grove of slender-trunked Aleppo pines 60 ft. tall. It was planted east of beautiful Beirut by Emir Fakhr-ed-Din to prevent Mediterranean sand from covering his beautiful city. This clump with its lofty branching boughs helps us imagine how pine groves in antiquity looked. Isaiah refers to choice fir trees (37:24) and to the planting of young fir trees, nourished by the rain (44:14), although some translators identify

these mountain-dwelling monarchs as cypresses. There is a wide latitude possible in translating fir, cypress, cedar, pine, balsam, box, and gopher. Were these all among the "thick trees" of which booths were erected on housetops at the Feast of Tabernacles (Neh. 8:15)?

Solomon ceiled his Temple at Jerusalem with fir wood (or cypress) overlaid with gold (II Chron. 3:5).

Gopher wood is mentioned as material of which Noah's ark was fashioned (Gen. 6:14). This suggestion is as apt as it is quaint, for gopher may have been cypress, and cypress was much used in construction of boats by merchant peoples of the eastern Mediterranean, from Greece to Phoenicia.

The myrtle (*Myrtus*) is also an evergreen, favoring coastal or mountain environments. It may grow as tall as 20 ft., or it may be only a bush; but its white flowers and aromatic fruits dried for condiments and perfumes have always been prized in Bible lands. This elegant and fragrant evergreen was carried during the Feast of the Tabernacles and was also used for booths on housetops (Neh. 8:15). The rider of the red horse, seen in Zechariah's vision, was standing in a myrtle grove in a shady place (Zech. 1:8). The Jewish word for "myrtle" is *hadassah*, the beautiful starry, white flower which gave its name to the Hebrew who became Esther ("star" in Persian), Queen of King Ahasuerus (Xerxes). It lives on in the Hadassah organization of benevolent Jewish women today.

The styrax or storax is so small and beautiful a tree that it may be classed as a shrub. Its dark, silvery leaves and flowers like orange blossoms grow abundantly on Galilee hills in summer. Palestinians today, states Grace M. Crowfoot in *From Cedar to Hyssop*, revere the styrax so much that they regard it as calamitous if one is cut down, even in wartime. They say it is holy because "Moses made his staff of this when he was leaving Egypt" and used it to guide his people, as a shepherd rods his sheep. It is holy, too, because it exuded the stacte gum of Old Testament Temple incense (Ex. 30:34). But some authorities translate this stacte *opobalsamum*, the balsam which yielded sacred myrrh.

The thyrine tree, whose wood was traded widely by Rome, as John of Patmos implies (Rev. 18:11-13), may have been a conifer similar to our arborvitae, whose fragrant, dark wood is susceptible of high polish and resists ravages of insects.

FRUIT AND NUT TREES

Describing the luxuries they found in the "fat land" of Canaan conquered by Israel, ancient writers mentioned "fruit trees in abundance" in connection with hewn-out cisterns, vineyards, olive orchards, and fortified cities (Neh. 9:25).

Several fruits were available in Palestine and Syria of the tenth century B.C. What were some of these? Their descendants still grow in the ancient soil and, with modern methods, are probably more plentiful than in ancient times.

The delicately flowering white almond tree blooms in January, the season of spring blossoms. This *shakedh*, "watcher" or "waker," was regarded by Hebrews as a symbol of new hope. Hence the blossoming almond rod of Aaron (Num. 17:8) preserved in the Holy of Holies was tribute to God's provision for his children and for a new national hope (Jer. 1:11, 12). Shekels of the optimistic Maccabean period of brief Jewish independence bore the budding almond, as well as the pot of manna (illus. 90). The delicate oil of the almond provided and still provides prized flavoring for foods. It contributed its graceful shape to the design of the sacred seven-branched candlestick of the Tabernacle: "three cups made like almond-blossoms in one branch, a knop and a flower; and three cups made like almond-blossoms in the other" (Ex. 25:32-38). Moses had seen the pattern of this lovely golden worship accessory while "in the mount." We have enjoyed a depiction of this candlestick on the Arch of Titus at Rome, bearing the procession of captives and booty from Jerusalem in A.D. 70.

Again, the unseasonable flowering almond rod was seen as a token of times being out of joint. Ezekiel (7:10) and the author of Ecclesiastes (12:5) both gave it this connotation. Pearle S. Wood, in *The Journal of Biblical Literature*, June, 1942,

deals with this "warning" of the almond by Yahweh to sons of rebellion. Eleanor A. King suggests that the almond may have come into Palestine from India or Persia. It was carried into Egypt by sons of Jacob, along with gifts of honey, spices, and myrrh (Gen. 43:11). Perhaps the only almond trees known to the tribes of the Exodus when fashioning their lamps and vessels of worship were ones they had seen in Egypt and remembered in the wilderness.

Pistachio nuts also grew in ancient Bible lands. These were among the gifts sent by Jacob to Pharaoh. Walnuts grew along the shores of Galilee and probably in Solomon's gardens. These were used in dyeing Galilean homespun seamless cloaks. Lloyd Douglas, in *The Robe*, states his belief that Christ's garment, for which soldiers gambled, was a thorn-torn brown homespun aba. Ancients prized nuts for their condiments as much as the sellers of sweetmeats in *sûks* of Damascus and Old Jerusalem's David Street.

Almug or *algum* trees, brought in large quantities by Hiram's navy from Ophir for Solomon's palace and harps, may have been red sandalwood (I Kings 10:11, 12). That they were treasured we know from the enthusiasm of the Chronicler, who said that never before or since were such almug trees seen.

The apple, according to Eva Sanford, grew in Asia Minor in early times and was distributed by Hittite traders all over the Mediterranean. We must not, however, translate as "apple" the fruit of the Garden of Eden, and of Solomon's garden (Song of Sol. 2:3), and of Joel's withering prophecy (1:12). These fruits were probably the golden apricot. Apples in the early Mesopotamian valley were too primitive for "table consumption," if indeed they ever grew there.

The apricot, indigenous to Armenia, according to Harold Moldenke, is the most abundant of all Palestine fruits except the fig. It is congenial to highland terraces and lowlands along the Jordan. It adapted itself to Cyprus and grew in Greece under the name of "golden apple." We wonder whether the mythical "golden apples of the Hesperides," created for the wedding

of Hera and Zeus, guarded by children of Hesperis, and obtained by a labor of Hercules, were apricots.

The date palm is the most royal and most welcome of Bible fruit trees. Seen by weary travelers from afar, its high, fanning branches call out, "Welcome! Life is here; we mark a well; come rest with us." The heavy clusters of fruit—golden yellow, dark brown, or mahogany—dangle temptingly and challenge the skill of trunk-shinneying pickers. They ripen in June and September all through Bible lands, from Egypt to Mesopotamian valleys, from the Palestine border along the Mediterranean at Raza, north to Tripoli, and east to the Plain of Jericho, known (Deut. 34:3) as the "city of Palm Trees" (illus. 122). Most impressive have we found them as we were going down the Palestine coast to Egypt: their feet are in the sea, while their heads tower toward the sun. Some of them have their trunks entirely hidden in white sand from the in-blowing Arabian Desert, so that their crowns look like low bushes. A few palms still grow in the Garden of Gethisemane on the western slope of the Kidron, giving credence to John's detail that the branches waved for Jesus' Palm Sunday procession (John 12:13) were palms.

Dates formed the basis of wealth in ancient times. When the first date boats push off from shores of Iraq today, the event is signaled with joy. Cargoes of wealth will come home for the date-palm growers. Some authorities believe the "tree of life" in the Garden of Eden was a date palm.

The palm is referred to more than sixty times in the Bible. The woman judge, Deborah, administered God's oracles under her palm tree (Judg. 4:5). The Psalmist (92:12) and Jeremiah spoke of righteous people flourishing "like the palm tree." Tall, well-built folks were compared to the stature of a palm (Song of Sol. 7:7).

Palms, used in Christian iconography as a symbol of victory, were lavishly employed in the sacred ornamentation of the Temple. This is described in I Kings 6 and in the temple envisioned by Ezekiel (40, 41). Ezekiel's stress of palm-tree symbols is easy to understand in view of his Baby-

lonian Captivity where palm groves abounded.

Our most exalting moments in Bible lands, it seems, have been times when we have come upon dramatically situated palm trees. One, waving below our window in the path of red dawn as it came over the face of the Sea of Galilee has etched a design on the red-gold coin of the sun. Another was seen unexpectedly amid a flourishing olive orchard on the west slope of Kidron. Again, a margin of palms has glorified sunset along Suez Canal at Kantara. An eloquently silent palm grove (illus. 15) on the site of an ancient capital of Egypt, Memphis, is now the shady browsing ground of fat heifers and of brambly children selling Egyptian mummy beads. A lonely palm waves from the deep gorge of Judaeon Wilderness Wadi Kelt at the punitive Convent of Elias. Again, lifebeckoning palm oases surround North African wells, like those which Simon of Cirene and other first-century apostles used as guideposts in their forward carrying of the gospel. Greece and Italy have given us fewer palms as landmarks of Bible scenes.

The fig tree (*Ficus carica*) must be closely associated with the sycamore fig of Amos who "dressed" with incisions these fruits of poor people he championed at the courts of luxury-loving kings. It grew and still grows wherever a bit of fertility clings to rock crannies or old walls between orchards, along mountain-terraces, and on summits such as Carmel, and in fertile, well-watered Galilee. It thrives everywhere from the Lebanons to the Dead Sea, in fact. Bible allusions are too numerous to list here. From the fig-leaf aprons or girdles—not an unscientific observation by Genesis authors, after all, for the fig leaves are as large as modern bathing suits—to the figs pressed by a thrifty housewife like Abigail (I Sam. 25:18) into cakes and used as food or made into poultices for King Hezekiah's boils (II Kings 20:7), fig trees run through the story of the Hebrew people. A fig failing to produce expected fruit on the Mount of Olives evoked one of the few vituperations of Jesus (Mark 11) and has ever since warned us away from an unfruitful

life. The normal fig produces twice a year, in June and in September. Some types, near Engedi, for example, yield throughout the year. For fig tree see illus. 122.

Nathanael was resting under a fig tree when Jesus saw him and recognized qualities of discipleship inherent in this Israelite in whom there is "no guile" (John 1:47-50).

The sycamore, branching low over roads, was immortalized by Zacchaeus when he climbed into its convenient branches to see Jesus (Luke 19:4).

Mulberries of two types have long featured landscapes in Bible lands, and we must dismiss entirely the imported variety of mulberry whose leaves were fed to Syrian silkworms for centuries for production of silk. The black mulberry, with its blood-colored juice, produced pleasantly acid fruit; the white was valued for its thicker shade, especially if it was part of a fig orchard, roofed with vines. Under such a bower Jesus must have rested at Bethany. The authors, exhausted one hot day from rambling over the great excavations of biblical Beth-shan, came to such a resting place at Beisan, where a man, in a mulberry garden just opening its season, insisted upon picking his first-fruits for us. The mulberry was also called by its Greek name, *sycamine* (Luke 17:6). Some authorities call the trees of Amos, fig-mulberries rather than sycamores.

The olive is one of the most sacred Bible trees. Cultivated all around the rim of the Mediterranean from the hot slopes of Spain to the hills of Samaria, with Italy and Greece furnishing their yield midway, the olive has been the companion of man through countless centuries.

The olive was associated intimately with the last prayer-hours of Jesus. It has for generations been a source of food and has yielded its oil for lamps in Temple and in peasant homes. Its by-products have rendered countless other services. The olive tree is the first feature of the Palestinian background which looks as we expect Bible lands to look. There is little wonder that olive-fed lamps were lighted on high places to mark the coming in of the new moon.

Mentioned fewer times in Scripture

than the fig, and barely one-tenth as frequently as the vine, the olive, nevertheless, remains with the Lebanon cedar the biblical tree par excellence. Moses called Palestine a "land of olive oil" (Deut. 8:8). Nobody can remember a time when olive trees were not growing there. Thousands of them antedated the arrival of the Hebrew people. At Gezer they were especially luxurious. And in lofty Samaritan highlands during the reigns of the ninth-century kings fat olives produced the chief wealth of the realm. Such is still the case in sections like ancient Shechem or Nablus. The latter is a dirty town specializing in manufacture of olive-oil soap, for export only, as we have seen!

The olive tree never thrives far from the sea, because mists are required for its growth. It does not like greater heights than 2,000 feet. In stony, red soil, in Greece, Italy, and Palestine, we have seen it flourishing on apparently barren ground. It takes an olive about ten years to begin bearing fruit, but it lives, as we have indicated, to a hoary age. It is not a shapely tree, in comparison with a pencil pine. In fact, its extraordinarily gnarled, coarse bark and hunched form sometimes makes it resemble a gnome. Its ethereal beauty comes from the misty veil of shimmering silver-green it throws over many a homely village or worn-down slope. Hence the phrase, "his beauty shall be as the olive tree" (Hos. 14:6).

The main crop of fruit ripens in November and is beaten off the tree with long poles. Poor people are allowed to gather a few from the top branches or the "gleanings" that remain after the first shaking. The fresh green color of ancient olive orchards on the edge of nearly every town in Bible lands today makes them seem able to endure the hot dry months. Eaten with coarse brown bread, olives are the main food of many. Nourishing oil is extracted from olives that have been bruised and crushed between two heavy stones, revolved by means of a pole. It is stored in earthen jars for future use or, when soda is added, is made into fine soap.

The longevity of olive trees is proverbial. People near Rachel's Tomb on Bethlehem Road claim that the trees at this point are "the oldest bearing olives in the world."

Certainly, hoary antiquity is characteristic of the venerable olives in the Gethsemane groves (illus. 124). The Franciscan Garden especially answers all our intuitions about the location of the prayer-place of Jesus on the night of his betrayal.

An olive tree speaks in the following lines:

That night in cool Gethsemane
Christ taught us immortality.
We heard him pray beneath our boughs
And felt his wrestling spirit's vows,
While high upon her ancient hills,
Jerusalem, walled in smugness, slept
Nor guessed that her own Saviour wept
Beyond the Kedron's full spring rills.

We trembled with his lonely woes,
We longed to crash on all his foes,
We saw his face when he arose—a
Conqueror!

So for his sake we cannot die,
But from our gnarled, decrepit root
Send up a new young slender shoot
To tell his victory to the sky.
Before our old self bows to earth,
We give a scion olive birth
To witness that we learned that night
When Christ slew death within our sight
And to our hushed Gethsemane
Entrusted immortality.

—M. S. M.

The tendency of olives is to send up a new young shoot before the old tree at last crashes to earth in dignified glory. Some of these monarchs of Gethsemane are probably heirs of the ones which sheltered Jesus when he went out to "a place which was named Gethsemane" (Mark 14:32), a place of olive presses. Their warm protection had many times attracted him to this slope overlooking Jerusalem to meditate (Matt. 24:3).

Olive oil, in lots of 20,000 qt., was paid as money by Solomon to Hiram of Tyre for services of his carpenters assisting in hewing cedar for the Temple.

Yet we prize the olive for less practical reasons. Returning by donkey from Tekoa in the wilderness known to Amos, we were glad to accept its shade, with stones as pillows, for our noon picnic and siesta, while our donkeys adopted another near-by olive for the same purpose.

Olive orchards are no longer needed to

supply illuminating oil for homes. High-tension lines carry power across the plains of Galilee (illus. 133) from the Yarmuk, right into Nazareth, home of Jesus, and to the near-by villages where he taught and healed. So into such museums as the one we have enjoyed at Corinth have gone the little clay lamps which once gave warmth with their nightly burning on tiny stands in peasant homes among the sleeping family.

For art purposes, the wood of the olive is too knotty and too brittle to be popular. Yet beautiful work can be done when wood is ripened for seven years. Olive wood went into the decoration of doorposts at the Jerusalem Temple. Two cherubim of olive wood were in the oracle of this sanctuary (I Kings 6:23).

The oil-tree or oleaster mentioned by Isaiah (41:19) is not a wild olive, but a low shrubby bush which bears bitter, olive-shaped fruit.

The pomegranate tree (*Punicum granatum*) with its bright-green leaves and decorative fruit was always cherished in Bible lands. Its fruit looks like a deep-rose, hard-shelled orange. From its pockets of red, seedlike kernels flows delicious juice having a pleasing bitter taste. The pomegranate is used for wine and medicine. In art it is a symbol of health and longevity. It grows plentifully near the springs of Cana of Galilee and must have often been enjoyed by Jesus. We have relished this July fruit at Cana near the ample springs where cattle drink, close by the site of the "wedding feast of Cana."

The pomegranate is in Palestinian art what the lotus is in Egyptian motifs. Its beautiful flower may have suggested the royal crown. In blue, purple, and scarlet, its fruits trimmed the skirts of priestly garments (Ex. 28), alternating with bell designs. Two hundred pomegranates adorned capitals in Solomon's Temple (I Kings 7:20).

Seeing prolific new citrus-fruit groves in the region of Jaffa and Tel Aviv, we have wondered when the orange made its first appearance in this ancient land. Eleanor A. King, in *Bible Plants for American Gardens*, states her belief that ancient Bible peoples ate both oranges and citrons. Other authors differ on this point.

SACRED TREES

In a sense, every tree in Bible lands is holy in that it is life-bringing. Especially venerable are the cedars of Lebanon, the olive, and the pomegranate. Grace Crowfoot, in *From Cedar to Hyssop*, calls attention to a less familiar sacred tree, the meis, two rows of which were said to have been planted by Solomon, to keep evil spirits away from his Temple. Several "descendants" of these still adorn the Place of the Noble Sanctuary, once Solomon's Temple Area. Its correct name is *Celtis australis*, popularly known as the hackberry or nettle tree. It has long, pointed leaves and bears small, edible, cherry-like fruit, believed by Mediterranean peoples to be conducive to the oblivion for which the "lotus eaters" ate it. The meis is a very handsome tree. Superstitious people feel that it is safe to sit under the meis, for no evil spirit will come there. They feel even safer wearing an amulet made from its sacred wood. A fragment from the meis tree near the pool below Bethlehem where the Wise Men found their lost star reflected is especially coveted.

Arabs feel the tamarisk (*Tamarix*) tree to be holy, because this small tree with its lovely pink or white spring flowers is thought to say in spring breezes, "Allah, Allah," in its own worshipful way. Conversely, the carob tree is considered by Arabs unsafe to sit under—an evil-bringing tree, the *Ceratonia siliqua*. Possibly Abraham chose a tamarisk tree to plant at Beersheba (Gen. 21:33) because he thought his type sacred. (So, at least, suggests Mould, in *Essentials of Bible History*, p. 17.) Abraham had known the thick groves of durable tamarisks in Babylonia.

Under a sacred tamarisk in Jebesh, Saul and Jonathan were buried with a seven-day ritual of fasting (I Sam. 31:13).

STREAM-LOVING TREES

The aspen (*Populus euphratica*) with its drooping leaves has been accepted by many as the "willow" on which the discouraged Hebrew exiles hung their harps as they sat "by the rivers of Babylon" and had no heart to sing the songs of Zion in a strange land (Ps. 137:1, 2). The erro-

neously named "weeping willow" did not grow in Babylon in Old Testament times but came out of China later.

The oleander (*Apocynaceae*), one of the most beautiful evergreens enjoyed by Palestinians in Bible times and now, keeps a ribbon of refreshing green alive along sun-baked wadies in summer. Time and again we have been refreshed by it in desert stretches. Its bright pink or white blossoms, believed by some to be the "rose of Sharon," are often the only bits of color in deep stream beds running down to the Jordan, as in the Wadi Nimrin. We have watched shepherds leading their flocks to such low places in hope of finding water there and cool shade under a bridge at high noon. Oleanders, as well as poplars, are included by Bible botanists with the willows in the "harp" passage (Ps. 137:1-3). Bedouins call them "fever flowers." They are somewhat poisonous. But perhaps the natives' fever is due to mosquitoes which bite them when they walk by the oleanders at evening.

Willows of several varieties appear in Bible narratives. The *Salix alba*, or white willow, is a beautiful variety rising 75 ft. and is particularly valuable along stream banks to prevent erosion.

We have seen beautiful tangles of fuzzy aspens and willows leaning far out over the Jordan and dipping their lower branches into its rapid, muddy waters, as though to carry its moisture back onto the thirsty shores, as the Egyptian shadûf lifts the welcome Nile to thirsty fields. Reeds mingle with the Jordan willows, and so do poplars and myrtle and "Christ's thorns." Seen from Allenby Bridge, this lacy tangle of green frames the chalky marl glowering north of Jericho across a bend of the muddy river (illus. 160).

"Willows of the brook," in the ancient ritual of Hebrew worship, were to be waved for joy (Lev. 23:40) and built into booths at the Feast of Tabernacles. Job refers to their making a protective bower (40:22). Isaiah makes picturesque allusion to fugitives from Moab, near Heshbon and Madeba, carrying their goods "over the brook of the willows," possibly the Wadi Nimrin to which we have referred above. Isaiah liked to prophesy the coming prosperity of Israel in terms of willows, perhaps

oleanders, spreading pink girdles of color along dancing watercourses (44:4). Trees and bushes of Bible lands answer the thirst cry of all people who have lived in sun-baked Palestine.

The willows of Ezekiel's parable (17:5) are associated with his dream of fruitful soil and abundant water.

REEDS AND RUSHES

There are so many varieties of reeds and rushes in Bible lands that other sources must be consulted by readers desiring meticulous details.

The reference of Matthew (11:7) to "a reed shaken with the wind" implies a tall, bending cane, possibly the *Arundo donax*, whose shining leaves make the Jordan underbrush tangle more bushy as it waves pluming flowers from stalks 8 to 10 ft. high. This type of reed was used for measuring rods in the visions of Ezekiel and of John. The vinegar-filled sponge was lifted to the lips of the crucified Jesus on this sort of reed or on hyssop.

The most valuable gift of the reed family to the world was the pen with which ancient peoples wrote messages on that other reed-gift, papyrus scrolls.

The tall papyrus reed, bulrush, or flag parallels the whole long history of Egypt. In a small, mud-daubed boat of papyrus, miniature of the large papyrus boats in which rich Egyptian families went hunting in their marshes, the infant Moses was hidden amid the camouflage of Nile reeds (Ex. 2:3). Hebrew toilers must have been often refreshed as they watched feathery tops of papyrus reeds waving in cool evening breezes; or they must have rebelled when they saw wealthy nobles hunting reed birds while they toiled in the flat, mud plains at their bricks.

Papyrus pith was shipped north to Byblos on the Phoenician coast and there made into paper. In fact, byblos is the Greek word for "book" or "papyrus paper" and thus gave us our word for the Book of Books.

Isaiah (19:7) refers to the paper reeds by the mouth of the brooks.

Some authorities believe that the sweet cane which Jeremiah prophesied would come like the frankincense of Sheba

(6:20) "from a far country" may be the sugar cane; others, calamus.

THORNS, THISTLES, AND BRIERS

The words of the hymn, "No more let . . . thorns infest the ground," have a true Palestinian background. Few lands of equal size have so many varieties of prickly plants. Camels and goats flourish on them. So widespread are they in one section of Mount Hermon that they give their name to the region, "District of the Thorny Burnet." Yet even these fast-spreading pests of the farmer have uses. They supply hot, quick fuel for peasants' outdoor ovens and for limekilns. Certain varieties make impassable fences. It is impossible to give accurate translations of the many varieties of thorns in Scriptures. But thorns seem to be what the woman of Ps. 58:9 had under her cook-pots; and wilderness thorns and briars were suggested by Gideon as suitable "threshing instruments" to torture the flesh of his enemies (Judg. 8:7). Thorns on altars of Israel were evidences of sin. Micah spoke of wicked men as "worse than a thorn hedge" (7:4).

There are certain thorny herbs whose needles, getting into sandals, prove tribulations. The caltrop was planted to interfere with progress of cavalry by injuring the horses' feet.

George E. Post claimed that not less than 200 species and 50 genera of plants of Palestine and Syria have thorns, spikes, or stinging hairs.

Tangled thorns, brambles, thistles, and spiked thickets like to wander over ruins of abandoned homes. To have nettles and thorns in his desert tent is the sum total of nomad's woe (Hos. 9:6).

The torture crown of Christ may have been the *Calycotome illosa*, grown near Jerusalem. Crusaders identified it as the *Spina-Christi*, or palinrus shrub, still plentiful in Judaea.

On the coast of Palestine today, near Jaffa and north to Lattakia, protective barricades of green brier and thorn are grown.

MONARCHS OF THE FOREST

The oak (*Quercus*) has at least a dozen varieties in Palestine and Syria. Forests of

oak once covered the Lebanon heights, Tabor, Carmel, and Gilead, as well as hills of lower Galilee and the neighborhood of Hebron. Descendants of Abraham's oaks at Manire (holm oaks), as they leaned over to shade bedouin camps near grazing flocks, have delighted our cameras' lenses and reminded us of Sarah and Abraham's ménage. Moslem Arabs venerate a certain oak of the Badariya as possibly "Ashtoreth herself." Certainly oaks went into her images.

There are many evidences of the reverence paid to oaks by people of Bible lands. The faithful nurse, Deborah, who accompanied young Rebekah on her betrothal journey from Mesopotamia to Canaan, was buried under an oak (ilex) below Beth-el (Gen. 35:8). The white tomb of many a holy man (wely) in Palestine today is under an impressive oak, terebinth, or plane. Old Judæan prophets were consulted by kings as they sat under their sacred oak or oracle tree (I Kings 13:14), even as the pagan sibyl of Italian Cumæ presided over trees on whose leaves she wrote her prophecies.

Amos (2:9) referred to Amorites as having the proverbial strength of an oak and the height of cedars. Isaiah put the mighty wailing oaks of Bashan (2:13) in the same class as cedars of Lebanon. So, too, did Zechariah (11:2).

Oaks supplied excellent masts and oars, as well as ships and "gods."

One of the greatest oak forests in ancient times extended from the Plain of Sharon south to the Shagur region. What became of it? Perhaps its descendants are trees we see today shading expanses of the fertile plain (illus. 130).

Either the *tefl* or the *terebinth* seems to have been the tree mentioned by Isaiah (6:13), along with the oak, as retaining substance after its trunk had been felled. The large oaklike *terebinth* yields resinous sap which gives it the name of "turpentine tree." It appears best on lower slopes in spring. The *terebinth* gave its name to the valley (Elah) where David took up Goliath's challenge (I Sam. 17:2). And under a *terebinth* (or oak) at Shechem Jacob hid "all the foreign gods" of his idolatrous household (Gen. 35:4). Evi-

dently this tree was well known to him, possibly the one under which his father Abraham had pitched his tent (Gen. 12:6). In the period of the judges, Abimelech was made king of Israel under an oak (*terebinth*) in Shechem (Judg. 9:6). Could it have been this same historic tree? Ancient people had trees as well-known to them as Washington's elm at Cambridge is to us, or the buttonwood in lower Manhattan, under which the New York Stock Exchange was organized.

The *plane* (*Platanus orientalis*) figuring in Jacob's craftiness of Gen. 30:37 is improperly translated "chestnut." It likes the banks of streams. The ash, fir, and pine have all been mistranslations of this pleasant tree casting enough shade to make a large gathering place where Near Easterners engage in their much-loved talk at evening.

The *poplar* of Gen. 30:37 was either the *storax* or the *Populus alba*, as Harold Moldenke believes. It was common along streams in Bible times and is still grown for its shade along watercourses. We have seen young ones along the River of Damascus, as it rushes down from the Anti-Lebanons. In their shade along the waterway, young Moslems kneel in prayer after parking their bicycles under a *poplar* (illus. 232). *Poplars* mingle with willows and trees along the hot Jordan near Jericho today (illus. 160). Botanists believe that *poplars* were the "mulberries" in whose tops there would be the "sound of marching" as Jehovah's signal for David's advance to victory (II Sam. 5:23).

The wild carob tree, whose long pods of sweet pulp called "St. John's bread" the prodigal son was glad to eat (Luke 15:16), is the "locust bean" or *Ceratonia siliqua* of wild spaces. Arabs dislike it, for they believe it is infested with "evil spirits."

The *Juniper* must also take its place among trees of the wilderness wastes. Elijah, fleeing from hateful Queen Jezebel and her consort King Ahab of Samaria, went "a day's journey into the wilderness," and sat down under a *juniper* (or broom tree), and prayed to die (I Kings 19:4). But an angel also found his way to the wilderness *juniper* and came offering cake, water, and encouragement. *Junipers* grow

today in the Lebanon and in Gilead. Eleanor A. King suggests that the heath of Jeremiah (48:6) may be the juniper.

WILDERNESS VARIETIES

God did not leave unadorned by life even the wildest waste places. Acacia trees, bushes 20 ft. high with spikes of feathery flowers, were abundant in wilderness wastes and along the Jordan. We can visualize them from our mimosa bushes. Desert acacia (*seyal*) or *shittah* yielded *shittim* wood, such as went into the building of the ark of the covenant (Ex. 37:1) and into the first Tabernacle. This was probably the only available wood. Its hard, orange-toned branches were insect-resisting. *Shittim* or acacia supplied clamps for mummy cases, thorny fuel for burning charcoal, food for cattle, and astringent bark for tanning leather. The *Acacia senegal* of Africa provided the real "gum Arabic." Numerous place-names were compounded with "*shittim*," for example, Israel's campground at "Abel-shittim in the plains of Moab" (Num. 33:49). Augusta Temple has queried whether the acacia might even have been Moses' "burning bush" (Ex. 3:2). She points out that the Hebrew word for "acacia" (*seneh*) gave the name to Sinai or Sinah.

Among other wilderness trees which space forbids our discussing here is the frankincense or *Olibanum*, whose trunks, when cut with deep incisions, oozed out a milklike juice which after three months dried into a resin for export. Grown in mountains of Arabia and Abyssinia, it was sought in ancient times for use in worship rites. Hence the historic appropriateness of its presentation to the infant Jesus by worshipping Wise Men from the East.

TREES IN BIBLE LANDS OTHER THAN PALESTINE

Assyria's highlands, with a temperature cool enough for snow at certain times, favored cultivation of fruits—apricot, mulberry, and grape. Her hills overlooked rich farms in the arch of the Fertile Crescent. Nineveh cherished her honeysuckle vines and used them as an art motif even as Egypt did her lotus or Palestine her pomegranate.

Babylonia, in the lower reaches of the mud flats of the Euphrates, was uncongenial to trees with the exception of the date palm, vast plantations of which were cultivated. Date farms were sources of the great Mesopotamian wealth from which sprang prolific art and business development in the "Land between the Rivers." Breasted has seen uplands of Assyria covered with wild flowers of every hue. From wall crevices at ancient Assur above the Tigris he noted blood-red anemones cropping out.

From the famous jewelry found at Ur in southern Babylonia, the Sumer of ancient times, we know that willows and beech trees were growing there in the third millennium B.C.

Egypt's trees are almost synonymous with palms, which girdle the Nile for many miles on both shores, dangling their tempting dates in July and August above the flat fields of vegetables and cotton (illus. 13). Etched against cloudless blue sky or fringing Suez Canal at sunset above a caravan of resting camels at El Kantara, Egyptian palms are superb. In ancient Egypt, wood was so scarce that pharaohs imported even material for mummy cases from cedar-producing Lebanon or the near-by Mediterranean islands, such as Cyprus or even Crete. Yet in lower Egypt today we see vestiges of great sycamores. At Matariyeh, near ancient Heliopolis, a tree carries the legend associated with the flight of the Holy Family to hospitable Egypt (illus. 121). And cultivated gardens have always produced almost any type of tree desired, as we have seen in the sport club grounds of Gezira and the Zoological Gardens at Gizah.

Egypt expressed her veneration of the trees she lacked in a leafy lore of immortality. In his *The Dawn of Conscience*, James H. Breasted tells how the gods sat on boughs of a tall sycamore at the gate of the heavens in the east; and then, when a new pharaoh was being ferried over in his reed boat to the realm of the sun, he seized hold of two sycamore trees as he alighted from his craft. The powerful Egyptian god Osiris, ruler of nature and judge of the underworld, himself floated at death to Byblos, a harbor of ancient Phoenicia. There he took on life again in

the form of a tree, symbol of resurrection which still lives, says Breasted, in the English Maypole set in the ground and decorated each spring. In Egyptian art, trees are shown growing out of the coffin of Osiris, god of grain and of imperishable vitality. In Egyptian religion there was a tree of life even before the Book of Genesis was written, for in a hymn to Amun, found in a Cairo papyrus considered more ancient than even the time of the monotheistic pharaoh, Akhenaton, we read of the Lord God, creator of all animals and of men, fashioner of the tree of life. To gain this tree of life on which the gods live, each departing pharaoh, in company with the morning star rules the mysterious island in the Field of Offerings where that tree grows.

Greece was as much the home of the olive, with her stony red soil and brilliant sunshine, as was Palestine or Spain. Minerva's sacred olive was her gift to Athens, rivaled by the offering of Poseidon, patron of the horse. On the Acropolis today, despite war's ravages, there still grows a vestige of an extremely ancient olive near the Erechtheum, symbolizing the supremacy of the olive business over herding as a basis of civic prosperity.

Islands of the Bible were mountainous and wooded. Crete was called by Pliny "the very home of cypress." The woodwork in the vast palace at Knossos was probably entirely of cypress.

Syria, extensive northern neighbor of little Palestine, always vaunted superior fertility. Her abundant watercourses rushing down from the lofty Lebanons and Anti-Lebanons brought life to many a prolific orchard, as we see with our camera-eyes. Plantations of the not-ancient mulberries which fed silkworms for Syrian brocades for centuries, until the Japanese spread artificial silk techniques, still provide luscious shade. But foremost are Syria's fruits, especially her golden apricots,

which revived us at Damascus when fleeing from riotous feuds within the Republic. The temperate climate of Syria and Phoenicia and her well-tended terraces have always brought forth fruit trees, which justify the Syrians' contempt for people of Palestine.

WISDOM OF TREES

There was wisdom in Daniel's interpretation of Nebuchadnezzar's dream of a tree so tall that it touched the sky and so broad that it viewed the whole earth (Dan. 4).

Jotham's ancient fable of the trees which went forth to select a king must have delighted every boy in ancient Palestine; it was embodied in the Book of Judges (9: 7-15). Jesus knew the excuses of the olive tree which declined the honor, and of the fig tree which did likewise, so that only the bramble was willing to "accept the nomination" to be ruler—even as today in organizations, mediocre talent is sometimes the only available for leadership. Jesus told several parables of trees, whose branches sheltered birds, whose shoots needed pruning, and whose seed germinated in ways too mysterious for eyes of man to observe. He likened himself to "the true vine," with disciples as branches indwelling in the stem (John 15:1). He declared, "Every plant which my heavenly Father planted not, shall be rooted up" (Matt. 15:13). He had observed tree wisdom in the Bethany garden and in groves of Galilean neighbors.

Interesting Arab legends of trees are contained in *From Cedar to Hyssop*, by Grace M. Crowfoot and Louise Baldensperger.

Tree symbols on ancient coins are worthy of study. Among these are the citron on the coin of Judas Maccabeus, the almond, and the palm (illus. 90).

For that most important of Bible plants, the vine, see Section 21, Viticulture.

ADDITIONAL BIBLE REFERENCES

"Then said all the trees unto the bramble, Come thou, and reign over us. And the

bramble said unto the trees, If in truth ye anoint me king over you, then come and take refuge in my shade; and if not, let fire come out of the bramble, and devour the cedars of Lebanon" (Judg. 9:14, 15)

Solomon "built the house [palace] of the forest of Lebanon . . . four rows of cedar pillars, with cedar beams upon the pillars" (I Kings 7:2)

He "shall grow like a cedar in Lebanon" (Ps. 92:12)

"Praise ye Jehovah . . . Fruitful trees and all cedars" (Ps. 148:1, 9)

The children of Israel . . . "gave money . . . unto them of Sidon, and to them of Tyre, to bring cedar-trees from Lebanon to the sea, unto Joppa, according to the grant that they had of Cyrus king of Persia" (Ezra 3:7)

"The thistle that was in Lebanon sent to the cedar that was in Lebanon" (II Kings 14:9)

"children like olive plants Round about thy table" (Ps. 128:3)

"the dove came in to him at eventide; and, lo, in her mouth an olive leaf plucked off" (Gen. 8:11)

"He shall . . . cast off his flower as the olive-tree" (Job 15:33)

"And as he was now drawing nigh, even at the descent of the Mount of Olives, the whole multitude of the disciples began to rejoice and praise God . . . saying,

Blessed is the King that cometh in the name of the Lord" (Luke 19:37, 38)

"Do men gather . . . figs of thistles?" (Matt. 7:16)

"the remnant that is escaped of the house of Judah shall again take root downward, and bear fruit upward" (II Kings 19:30)

"the man that trusteth in Jehovah . . . he shall be as a tree planted by the waters" (Jer. 17:7, 8)

"the land which hath drunk the rain that cometh oft upon it, and bringeth forth herbs meet for them for whose sake it is also tilled, receiveth blessing from God" (Heb. 6:7)

"reeds and flags . . . meadows by the Nile" (Isa. 19:6, 7)

"A bruised reed will he not break" (Isa. 42:3)

"As of a boiling pot and burning rushes (Job 41:20)

"springs of water . . . grass with reeds and rushes" (Isa. 35:7)

"if it beareth thorns and thistles, it is rejected" (Heb. 6:8)

"the root of the righteous shall not be moved" (Prov. 12:3)

BIBLIOGRAPHY

Boggis, R. J. E., *Down the Jordan in a Canoe*, Society for Promoting Christian Knowledge, London.

Borah, Adelaide, articles in *American Forests*.

Breasted, James H., *The Dawn of Conscience*, Charles Scribner's Sons, New York.

Cheyne, "Flowers," "Trees," *Encyclopedia Biblica*.

Crowfoot, Grace (and Baldensperger, Louise), *From Cedar to Hyssop: A Study in the Folklore of Plants in Palestine*, The Sheldon Press, London.

King, Eleanor H., *Bible Plants for American Gardens*, The Macmillan Company, New York.

King, Eleanor H., "Plants of the Holy Scriptures," *Journal of N. Y. Botanical Garden*, March, 1941.

Ludwig, Emil, *The Mediterranean, a Saga of the Sea*, Whittlesey House, New York.

Moldenke, Harold N., "Plants of the Bible" (mimeographed brochure).

Petrie, Sir Flinders, article in *Ancient Egypt*, 1917, British School of Archaeology.

Pomfret, John E., *The Geographic Pattern of Mankind*, D. Appleton-Century Company, Inc., New York.

- Post, George E., *The Flora of Syria, Palestine and Sinai* [The American Press, Beirut], and articles in *A Dictionary of the Bible*, Charles Scribner's Sons, New York.
- Rosenberg, Pauline, article in *Nature Magazine*, December, 1934, Museum of Biblical Botany at Hebrew University, Jerusalem.
- Smith, Sir George Adam, *Historical Geography of the Holy Land*, A. C. Armstrong and Son, New York.
- Spanton, W. D., "Water Lilies of Ancient Egypt," *Ancient Egypt*, bound volume, 1917, Part I, British School of Archaeology, Egypt, The Macmillan Company, New York.
- Steindorff, George, and Seele, Keith C., *When Egypt Ruled the East*, University of Chicago Press, Chicago.
- Thompson, W. M., "Fruits and Flowers," *The Land and the Book*, Vol. I, Harper & Brothers, New York.
- Wood, Pearle S., article in *The Journal of Biblical Literature*, pp. 99ff., June, 1942.

GEOGRAPHY

Every place whereon the sole of your foot shall tread shall be yours: from the wilderness, and Lebanon, from the river, the river Euphrates even unto the western sea shall be your border.

—Deut. 11:24

Introduction

What Effect Has Geography upon People?
 What Do We Mean by "Bible Lands"?
 Varied Environments in Middle East
 Geological Phenomena
 Nile versus Tigris-Euphrates
 Mesopotamian Floods
 Contributions of Egypt
 Fleishpots and Labor Oppressions
 Disease
 Geographical Facts about Palestine
 Extent
 Topography
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 The Jordan-Dead Sea Rift

How Geography Aids Bible Understanding

Identifying Bible Sites
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 "Ups" and "Downs" of Palestine
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 Carmel Contest and H. M. S. "Repulse"
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 Joshua's Canaan
 Moses' Vista from Pisgah
 Geography and Jesus
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 The Inexplicable Christ

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INTRODUCTION

WHAT EFFECT HAS GEOGRAPHY
UPON PEOPLE?

Geography is much more than the science of countries, mountains, rivers, cities, their names, location, and products. Geography is one of the vital forces in life and history. A Harvard geologist declares, "History is geography in motion."

Geography as a force is discernible in the story of Bible life. The claim of the out-and-out environmentalist that a people's mode of life is forced upon it by the character of its habitats is an oversimplification of the situation and can be refuted. The proximity of the sea to their homes does account for the maritime greatness of the Phoenicians. The same eastern Mediterranean waters wash the shores where the Hebrews lived. Yet, with the exception of Solomon's little merchant marine, only a

few Jews in the ancient world went "down to the sea in ships." On the other hand, no one would deny that men's ways of life or habits of thought are influenced by geographical factors. Between these extremes of the geopoliticians and the non-environmentalists, the neogeographers have adopted an intermediate position in which the effect of geography can be plainly traced in some instances in human conduct, and in others to something within an individual or a people which makes them rise above and completely surmount their material surroundings.

Great sections of the Bible lands are in arid or semiarid areas, and here the nomadic ways of life have persisted with little fundamental change since the dawn of history. The nomadic world of the Arab today continues the life pattern of the patriarchs and the early Bible period. This is due largely to geographic necessity. The temperate zone, with its exhilarating

fluctuations from warm to cold and its well-proportioned amounts of sunshine and shower, has been in recent times the land of social progress and invention where God has first revealed His latest truths about His universe.

Geography in one period of history has not had the same effect upon the same people as in another epoch. Noting the large number of life-sized monuments in Cairo dedicated to pashas, Wendell Willkie asked a young nationalist newspaper man what particular distinction was required of an Egyptian to qualify as a pasha.

"Does a man become a pasha by writing a great book?" asked Willkie.

The Egyptian answered, "I suppose he could, except that almost no one in Egypt writes books."

"Do you get to be a pasha by painting pictures?" the American visitor asked.

"There is no reason why you couldn't except that no one here paints pictures."

"Does a great inventor get to be a pasha?" Willkie queried.

"We have had no great inventions that I know of since the time of the pharaohs," the Egyptian replied.

There was a time when this whole Middle East, amid climatic conditions similar to those prevalent today, and in some sections far worse than what modern Egypt offers, attained great heights of excellency in art, literature, science, and especially religion. Here was the laboratory of the Almighty, a cradle of civilization, the Garden where God walked with man in the evening cool of those early days.

WHAT DO WE MEAN BY "BIBLE LANDS"?

By "Bible lands" we mean the following countries: Palestine; the Levant states of Lebanon and Syria; Transjordan; Iraq (Mesopotamia-Assyria, Babylonia); Iran (Persia); Sinai; Egypt; Turkish Anatolia (Asia Minor); Greece; and Italy. All of these lands have depicted Bible personalities, customs, or landmarks on their postage stamps.

While the Mediterranean in terms of human events is considered the arena of ancient times, yet in terms of the geologist

it is a very youthful portion of the earth's surface, for it came into being in the Tertiary or our present Quaternary period when man was already living. A mighty shrinking of the earth's surface caused by pressure from within created depressions and elevations which are traceable around this Middle Sea. The western basin of the Mediterranean is entirely surrounded by mountains. The Sierra Nevada in Spain, the Alps in southern France, and the Apennines running throughout Italy continue in Sicily and form a mountainous land-bridge across the Mediterranean. The circle is completed by the Atlas system of North Africa.

VARIED ENVIRONMENTS IN MIDDLE EAST

The eastern basin of the Mediterranean with which we deal particularly is not so orderly. Its shore lines are broken by inland waters such as the Adriatic, the Aegean and Levant seas, with irregular protruding peninsulas of great size. The mountains of Greece are irregular. In Asia Minor they spread out from the Aegean, not unlike the fingers of a hand, far into Asia; run parallel to the eastern coast in the Lebanon; rise to highland heights in Palestine; drop to sub-sea-level depressions in the Jordan-Dead Sea rift; and disappear from the map entirely along the North African shores. No area on all the earth's surface has such a variety of spreads in irregular formations as this. Was it not a part in the divine plan of creation and redemption to construct this physical cradle of religion in such a variegated environment?

GEOLOGICAL PHENOMENA

Not only does this eastern Mediterranean basin show clearly the physical result of the last of the great acts of creative force in the Tertiary period, but here today can be seen some of the forces in this process still at work. Volcanoes have filled the pages of classic literature with their fury and their faith. The fire-god, Hephaestus, whose first home was the natural-gas vents in the neighborhood of Greek Mount Olympus, also forged the

thunderbolts of Zeus on Sicilian Etna. The Lipari Island of Stromboli with its regular eruptions was and still is called the "Lighthouse of the Mediterranean." The Bay of Naples, with its earthquakes and subsidences, its odoriferous Solfataras, steaming hot springs, and fire-belching Vesuvius which guided Allied fliers to their targets in World War II, furnishes a concrete pattern of what was widespread throughout the eastern Mediterranean in an earlier period. John Garstang thinks that the fire in an unconsumed bush (Ex. 3:2-3) was the activity of an intermittent volcano which awoke Moses to the realities of Yahweh, the pastoral conception of the Almighty precious to the Midianites. He adds, "Seismic phenomena and their widespread consequences may be held to explain largely both the traditional circumstances of Israel's escape and the disaster to Pharaoh's pursuing force." A pillar of cloud by day and a fire by night guiding the pilgrim Israelites in their flight across the Sinai Peninsula perfectly fit the description of an active volcano. The giving of the Law described in Ex. 19:20 was to the terrifying accompaniment of smoke, fire, thunder, and earthquake, in which both Moses on the mount and the people in the valley shared. The fusion of an ethical and highly moral deity with the God of nature and mountains took place amid this characteristic cataclysmic Mediterranean phenomenon. The destruction of Sodom and Gomorrah (Gen. 19:23-28) can be physically explained by geological activity. The story of the fiery furnace in Babylon into which Nebuchadnezzar cast the three friends of Daniel—Shadrach, Meshach, and Abednego (Dan. 3:19-30)—might have led to the discovery of oil in Mesopotamia long before its modern exploitation if prospectors had been discerning Bible students. Many Scripture scenes were enacted against a background of elemental forces as spectacular as they were extraordinary. At the crucifixion "the veil of the temple was rent in two . . . the earth did quake; and the rocks were rent" (Matt. 27:51). "And the sun was darkened" (Luke 23:45).

The result of this extraordinary eastern Mediterranean environment was that it not only stimulated thought but influenced the

very form of man's thoughts, expressed all the way from the gropings for explanations in early mythology to the cataclysmic theory of life in the Greek and Roman classics, reaching a climax in the Hebrew and Christian theology which culminate in the doctrine of the cross. In Bible lands geography and theology blend in a faith which triumphs over hardship, the extraordinary, and the inexplicable.

NILE VERSUS TIGRIS- EUPHRATES

The debate still continues as to which of the two river valleys, the Mesopotamian or the Egyptian, made the greater contribution to Judaism and Christianity. The eastern Mediterranean shores lie midway between these two river systems. If Palestine is the cradle of our faith, Mesopotamia and Egypt are the rockers of that cradle. Both lands made priceless contributions to our religion and civilization. The Tigris and the Euphrates rivers (illus. 237) rise in the Armenian mountain knot, flow in a southeastern direction between folded mountains, and empty into the Persian Gulf. The Nile (illus. 13), formed from the melted snows and rains of the mountains in equatorial Africa, flows in a northerly direction. This reversal in the flowing waters of the two river systems was a great mystery to the ancients. Both rivers developed the art of navigation. The preponderance of level land in the Mesopotamian region speeded the discovery and use of the wheel (illus. 194). Both rivers had their irrigation systems (see Section 1, Agriculture).

MESOPOTAMIAN FLOODS

However, there was this profound difference between the two systems: the Tigris and Euphrates were more difficult to control and frequently changed their course, so violent was their overflow. The lower Nile Valley never has any rainfall, but the rhythmical rise and fall of its waters were invariably predictable. There are, therefore, no catastrophic flood stories coming out of Egypt, where the gradual inundations were a blessing. The flood narrative of Gen. 6:13-7:24 is Mesopotamian in its



125. Where Mount Carmel Ridge leaps into the Mediterranean at Haifa. Monastery of Elijah on the headland at left. On this ridge, but east of elevation shown here, occurred contest between the prophet and the priests of Baal described in I Kings 18: "And it came to pass in a little while, that the heavens grew black with clouds and wind, and there was a great rain" (v. 45).

126. Northwestern shore of Sea of Galilee near Bethsaida (Tabgha), where Jesus recruited early disciples (Matt. 4:22).



127. Mount of Precipitation, south of Nazareth in Galilee. From such an elevation, hostile citizens of his home town threatened to hurl Jesus headlong (Luke 4:29).



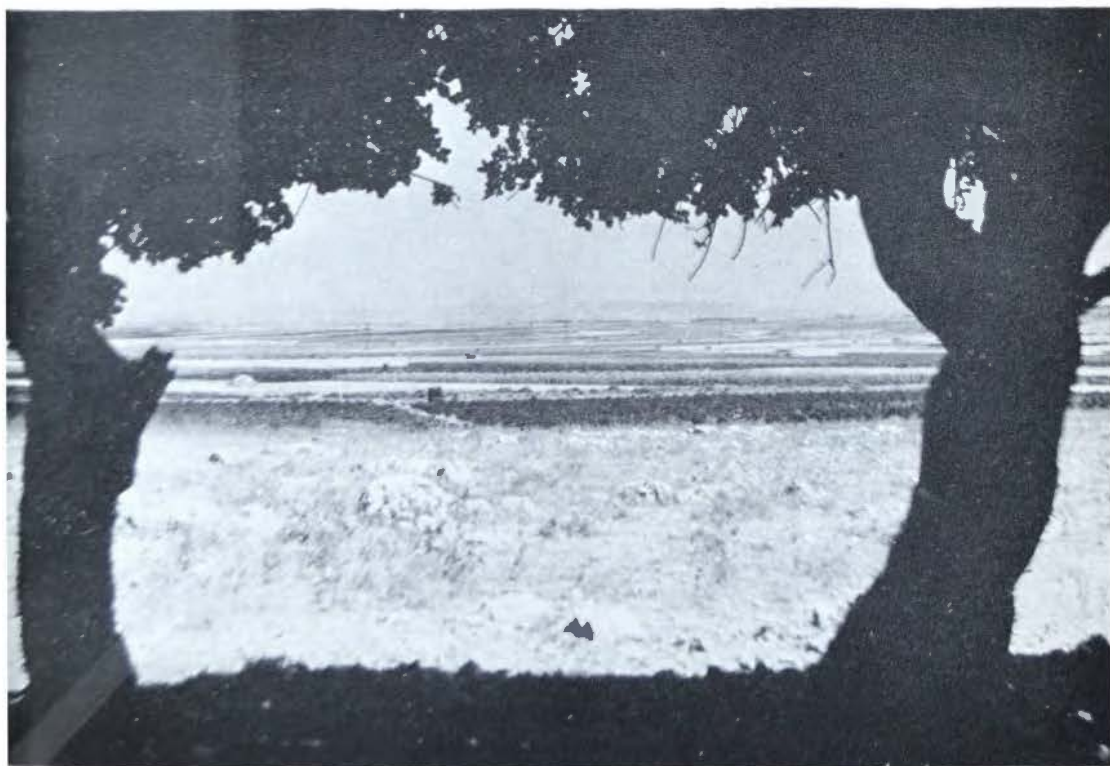
128. The mound of Dan, northern boundary of ancient Israel and of modern Palestine (I Sam. 3:20).





129. The Wadi Zerqa, the ancient Jabbok of Gen. 32:22, cutting its deep division through Transjordan. Here at frontier between Ammon and Gilead, the Patriarch Jacob wrestled in prayer. Oleanders furnish a girdle of color along the dry summer stream bed.

130. The excellency of the Plain of Sharon (Isa. 35:2).



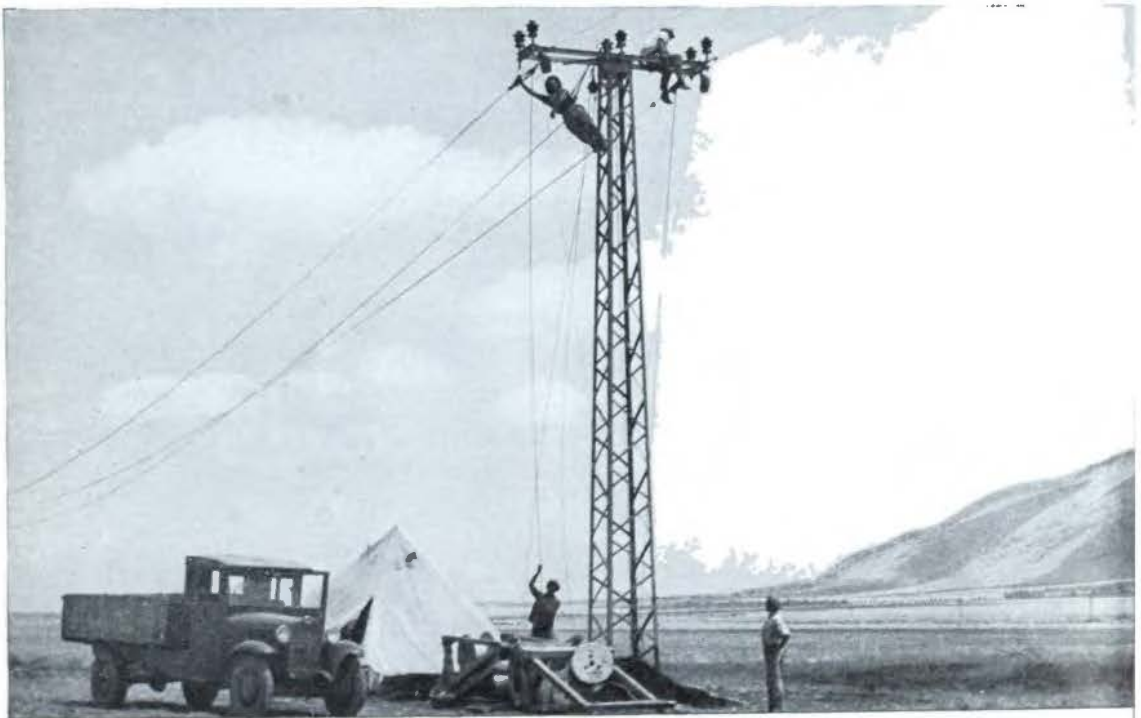


131. Camel train crossing the Plain of Hattin, with the Mount of Beatitudes in background (Matt. 5:1).

132. Infrared picture of the Jordan River entering the Dead Sea, as seen from Mount Nebo. On the summit of the 1200-ft. elevation at center of the picture appear buildings on the Mount of Olives. (Matson Photo Service, Jerusalem)



133. Fertile volcanic soil of the Plain of Esdraclon. Electricity is furnished today for Palestine by a Jordan power plant, whose wires are seen here.



origin, thoroughly Mediterranean in its catastrophic tragic mood. When we trace the journey of Abraham (Gen. 11:31) from Ur by boat up the Euphrates or along its level shores, around the Fertile Crescent (Gen. 12:5), to the trail south along the Mediterranean, avoiding the hot, dangerous Syrian Desert, we can see how Mesopotamian literature and influences followed clearly a geographic highway into Palestine from the time of the patriarchs. Likewise, "the wisdom of the Egyptians"—especially their belief in the immortality of man—traveled north from the southern horn of this Fertile Crescent over caravan trails and sea routes and captured the thinking of the Hebrews as completely as Pharaoh had enslaved their ancestors.

CONTRIBUTIONS OF EGYPT

FLESHPOTS AND LABOR OPPRESSIONS

Egypt lingered in the minds of some Jews after the Exodus "as a land of flesh pots where they did eat bread to the full" (Ex. 16:3) and to which they would be glad to return. Yet this positive appraisal of the Nile Valley was outweighed by the adverse memories and experiences the Jews had there with the Egyptians and their land. The Exodus liberated them from the social and economic order of Pharaoh. The demand of Moses to Pharaoh was the ultimatum of a labor leader, and the Exodus one of the earliest recorded walkouts in history. No proletariat was ever more determined than the workers in the brickyards of Goshen not only to protest against a vicious economic system but to flee from the clutches of the strongly entrenched, highly privileged, plutocratic boss. So the Jews in this chapter of their racial history blazed the trail for all economic, social, and political freedom. The main theme of their literature concerning this phase of their life was their fortunate escape, due to the providence of God, from the hardship, suffering, and slavery of the Nile Valley. So, while Mesopotamia contributed the original traditions of catastrophe which became under the theistic editorial mind of the Jews our early Genesis stories, Egypt gave these people their first real experience of hard

and tragic living. Across many pages of the Bible, Egypt casts a sinister and tragic shadow. War was always a threat, often a reality, from this neighbor to the south. When Palestine was not so threatened, the tribute which had to be paid to Pharaoh for "protection" and "peace" was an irritation (II Kings 23:33-35).

DISEASE

Egyptian pestilence was a reality to the Jews because of geography. In days of inaccurate medical records and diagnosis the illness which came up out of Egypt is referred to in the Bible thus: "the evil diseases of Egypt which thou knowest" (Deut. 7:15); "the boil of Egypt" (Deut. 28:27); "all the diseases of Egypt" (Deut. 28:60); "tumors" (I Sam. 5:6-9); "Hezekiah sick unto death" (II Kings 20:1); "and Jehovah sent an angel who cut off all the mighty men of valor and the leaders and the captains of the camp of the King of Assyria" (II Chron. 32:21). All these quotations indicate that Egypt was a source of infection and disease to its neighbors. When Moses stood before Pharaoh and pled for the liberation of his people, he utilized the diseases which were endemic to urge his claims on the reluctant monarch: murain of cattle (Ex. 9:1-7); boils (Ex. 9:8-12); death of first-born (Ex. 12:29-30). George Adam Smith says: "Throughout antiquity the northeast corner of the Delta was regarded, with reason, as the home of the plague. The natural conditions of disease were certainly prevalent. The eastern mouth of the Nile then entered the sea at Pelusium and supplied a great stretch of mingled salt and fresh water under a high temperature. To the west there is the swampy Delta, and on the Asiatic side sand hills with only brackish wells. Along the coast there appear to have been always a number of lagoons, separated from the sea by low bars of sand and used as salt pans. The dry sand blowing across it gave it the appearance of solid ground which was sufficient to bear those who ventured on it only until they were beyond flight or rescue; and it swallowed part of more than one unfortunate army (ideal conditions to explain the destruction of Pharaoh's host) (Ex. 14:15-

31). The extremes of temperature are excessive. All the armies coming from the north reach these unhealthy conditions exhausted by an arduous march across the desert. Coming from the south, armies picked up the infection with the possibility of its breaking out after the heat of the desert was past." The Philistine cities of southern Palestine were especially exposed to the Egyptian infections by soldiers, sailors, and travelers. This geographic fact throws some light on the epidemic of "tumors" which swept through this section when the Philistines had the "ark of God" in the house of Dagon (I Sam. 5:1-6:18). The plague was presumably stayed not only by removing the ark from the Temple of Dagon and providing the sacred symbol with a new cart which conveyed it to Kerjath-jearim, but by offering costly sacrifices of golden "boils" and "mice"—the Egyptian symbol of the plague, used to combat disease. It is significant that when King Hezekiah "was sick unto death" at Jerusalem and received efficacious treatment, the Assyrian army of Sennacherib which had been in this plague-infected region of northern Egypt was also swept by this death-dealing pestilence. No fig poultices such as the court physician was able to administer to the King at Jerusalem were available for these soldiers. Devastation from this malady was complete. The patriotic writer of II Chronicles described the disaster in language sacred from the Jewish standpoint: "Jehovah sent an angel who cut off the camp of the King of Assyria." Herodotus (Book 2:141) explains what happened in a more realistic way by attributing the destruction of the army to the plague which incubated in this northeastern Egyptian pest-hole and had spread as far north as Jerusalem.

GEOGRAPHICAL FACTS ABOUT PALESTINE

EXTENT

Palestine has an area of 10,000 square miles—just a little larger than the state of Vermont. It adheres today largely to the geographical specifications of the Old

Testament, extending from "Dan to Beersheba" (Judg. 20:1) (illus. 128 and 231). When Sir Herbert Samuel, one time British High Commissioner of Palestine, was on an American tour he was asked whether Dan and Beersheba, to which he had referred in his lecture, were brother and sister or man and wife!

TOPOGRAPHY

Topographically the land, like Caesar's Gaul, can be divided into three main parts: the Maritime Plain; the mountainous, spinal middle; and the Jordan-Dead-Sea rift, called by the Arabs the "Ghor."

THE MARITIME PLAIN

The Maritime Plain consists of the Philistia of early Bible times and the Plain of Sharon. The level stretches of Philistia gradually rise with diminishing fertility to meet the low hills of the Shephelah to the east and blend with the desert stretches of the Sinai Peninsula and Egypt to the south. Northward between Joppa and Mount Carmel this extremely fertile stretch is known as the Plain of Sharon, (illus. 130), one of the oldest homes of man, culogized for its flowers and until after Crusader times for its forests (Isa. 35:1-2). The Maritime Plain parallels the sea, continues beyond the Mount Carmel interruption (illus. 125) through Lebanon and Syria, and forms not only one of the most productive food belts in the Middle East but the main travel thoroughfare connecting all Bible lands. Along this road which at times used the sandy beach for its caravans, Egyptian, Babylonian, and Assyrian influences and later Greek and Roman forces flowed and ebbed with consequent political, cultural, philosophical, and religious effects on the whole of Palestine.

Carmel headland at Haifa and the "Face of God" Promontory in Lebanon are the only two coastal projections of importance (illus. 125).

JUDAEA AND THE CENTRAL MOUNTAIN RANGE

The southernmost portion of the central mountainous ridge is Judaea. This section is bounded by the Negeb, translated "the

south" in our Scriptures (Gen. 13:1) and meaning literally the "dry" or "parched land." On the west, Judaea meets the low rising hills already mentioned. These serve as a gentle buffer to the Maritime Plain. The Judaeian mountains contain such historic centers as Hebron, Bethlehem, and Jerusalem and merge into the hilly and ancient preserves of the tribes of Benjamin, Ephraim, and Manassah. Hebron is 3,000 ft. above sea level. The open, luxurious valleys of Samaria are less than 600 ft. above sea level with Mount Gerizim (2,800 ft. high) sacred to Samaritans on one side of the pass and Mount Ebal (3,120 ft. high) on the other. At this point the mountains turn abruptly to the west as the Carmel ridge executes a dramatic nose dive into the Mediterranean (illus. 125). Along the northeastern exposure of this ridge begins the Plain of Esdraelon, the western portion of which is known as the Plain of Megiddo, while the eastern section is designated as the Valley of Jezreel—gateway to the Jordan Valley with Beth-shan as sentinel. This irregular triangle of central plain, 200 ft. above sea level, is the most fertile land of all Palestine. North of Esdraelon the rolling hills of Galilee (illus. 127) surround Nazareth, the home of Jesus, with luxurious fields and orchards. This main central elevation of Palestine continues to rise until it reaches in the adjacent Levant states Lebanon and its parallel mountain chains with Mount Hermon and its cap of snow 9,700 ft. above sea level.

THE JORDAN-DEAD SEA RIFT

The main eastern geographical unit, the Jordan and Dead Sea rift, is the most unique physical phenomenon on the earth's surface. Here is mute evidence of that early geological disturbance which formed the Bible lands of the Middle East. The Palestinian portion is part of a huge fault extending 350 miles from between the Lebanons in the north to the Gulf of 'Aqabah in the south. Engineers are convinced that a rival canal to Suez could be constructed between the Mediterranean and the Red Sea by utilizing this natural depression. Walter Clay Loudermilk in "Palestine, Land of Promise," also

proposes a "Jordan Valley Authority," a counterpart of our American TVA. By such a scheme the sweet waters of the upper Jordan would be diverted for extensive irrigation and the salt waters of the Mediterranean would be channeled and tunneled from Haifa Bay through the Plain of Esdraelon and dropped into the Jordan below the Sea of Galilee. This would maintain the Dead Sea at its present level, while generating electric power to the extent of approximately 1,000,000,000 kilowatt hours per year for the industrialization of Palestine. All such schemes are engineering possibilities because the Jordan-Dead Sea rift is the deepest ditch on the face of the earth. The Dead Sea, which is the southernmost limit of our brief geographical survey (illus. 132), is forty-seven miles long, with an area of c.400 square miles. Its surface is 1,292 ft. below sea level. Its depth is another 1,200 ft. An unknown poet of the last century has drawn heavily upon the Dead Sea fact that

All that it got, it kept and fast did hold,
All tributary streams found here their grave.
Because the sea received but never gave.

A new day, however, has come to the Dead Sea challenging a new bard. The rich chemical accumulations of the centuries, such as potassium chloride, magnesium bromide, and magnesium chloride in solution there, are now being extracted and commercially marketed, demonstrating that there is no waste in God's plan for His universe. Man by his ignorance is the great enemy of conservation. The Jordan River (illus. 160) zigzags, curves, and swirls almost 200 miles to travel the sixty-five miles from the Sea of Galilee to the Dead Sea. Its fall is about 9 ft. per mile. "Roll, Jordan, Roll" gives a correct description of its dangerous rapids; even in its quieter waters where ceremonial baptisms take place ropes are often strung to protect the participants. The Sea of Galilee, a body of water as heartsome as it is heart-shaped, is thirteen miles long and eight miles wide, with a water surface one-half the size of Swiss Lake Geneva (illus. 162). Around this lake 680 ft. below sea level Christ carried on the greater part of his ministry. We have seen visitors to its shores so overwhelmed by the weight of

sacred incidents which happened there that they could not restrain tears of emotion. Others who had no Christian awareness of its associations were rendered speechless by its peaceful beauty. A "TVA" would greatly change this region.

The Jordan rises in the territory of the tribe of Dan which gives the river half its name. Paneas, with its rushing springs on the western slopes of Herman joined with the melting snows of the mountain, is the river's source. Here for centuries amid prolific groves was a cultic shrine of the Hellenic Pan and the far earlier Canaanite nature-gods. So great a rendezvous was it for the people that Herod the Great in 20 B.C. adorned Paneas with a temple to Caesar Augustus, dedicated to emperor-worship. Later, when Philip the Tetrarch inherited this exquisite spot, he built a city here and called it, in honor of his ruler Tiberius and of himself, Caesarea Philippi. Therefore, there is profound significance in the fact that when Jesus came into the "borders of Caesarea Philippi," a city devoted to the nature cults and emperor-worship, which as a pious Jew he would not enter, he here carried on with his disciples that dialogue which gave birth to the Christian Church; set forth the nature of the faith which would preserve it; and declared for all time the centrality and primacy of his person. "Who do men say that I the Son of Man am?" (Matt. 16:13-18).

"Some say John the Baptist, others Elijah," the disciples replied.

How natural it was that any current survey of public opinion in this section should be answered in terms of Jordan Valley characters. John the Baptist had carried on his ethical ministry and ceremonial practices in the Ghor (Matt. 3:13). Elijah had ascended into heaven and disappeared from the eyes of man from the banks of the Jordan (II Kings 2:11-13).

"But who say ye that I am?" asked Jesus.

"Thou art the Christ, the Son of the living God," replied Simon Peter.

In this positive declaration the knockout blow was struck against nature-worship and the religious devotion to human personality which in various forms would arise in every century to lead men away from the understanding of the true God.

HOW GEOGRAPHY AIDS BIBLE UNDERSTANDING

James H. Breasted declared that his four-hour motor trip through the ancient Kingdom of Assyria which stretched from 80 to 100 miles along the Tigris River demonstrated the economic and historical geography of that country in such a way as he would have gained only by years of study of maps, photographs, and the description of others. Every visitor to Palestine is aware of the new vitality which comes to his Bible by firsthand contact with its geography. An ounce of eyesight is worth a ton of print. Bible students should always read the Scriptures with a good map near at hand. The best single map we have found of Bible lands for the average student and small classroom is prepared by the National Geographic Society, Washington, D. C. It covers all the countries under consideration except Greece and Italy and has smaller inserts around its border, emphasizing Palestine, Jerusalem, and Paul's travels.

IDENTIFYING BIBLE SITES

The location of many Bible events has been accurately determined. Some fraudulent sites have been perpetuated because they have been highly lucrative to natives and easily accepted by gullible visitors. Even such pious frauds have in some instances contributed to Christian faith. The same frauds have proved detrimental to the religion of other people. Archaeology furnishes the authoritative answer for many a site. Sometimes a present-day Arabic name by the shift of letters and sounds gives a clue to an old biblical location. Arabic "Banias" is "Paneas" of Christ's time; "Ain Kedcis" is the "Kadesh" (Num. 20:1; Deut. 1:46) of the long Exodus sojourn. "Buseirah" in present-day Transjordan is the biblical "Bozrah" (Amos 1:12). An archaeologist who is also an etymologist, as W. F. Albright is, speaks with the authority not only of the spade but also of the dictionary.

TELLS, WADIES, WILDERNESSES

Every tell challenges an archaeologist. A "tell" is a hill shaped like a truncated

conc. inside of which a series of towns lie buried. It is formed by destructive forces of nature or man such as earthquake, war, or fire. Torrential rains wash the loose soil down over the demolished masonry, and nature in time renders the burial undetectable except to an expert eye. Sometimes there is a current settlement on top of the mound, as at Beth-el. Sometimes there is none, as at Dan, called "Tell-el-Kadi" (illus. 128).

A wadi is a valley, river, or a ravine through which a stream flows or has flowed. In many Palestinian channels the watercourse is dry except in the rainy season. In summer, beds of the dried-up streams are often gorgeous with pink and white oleanders giving color and life to the parched countryside. These wadies are natural highways for travelers. The famous pass over the Carmel Ridge connecting the Maritime and Esdraelon plains over which Tuthmosis III and Ramesses marched in their advance from Egypt to the Hittite country and the Euphrates and back was used by Tiglath-pileser, Shalmaneser, and Sargon as they swept south to the Philistine cities. It begins on the Plain of Sharon, runs in a northeast direction up the Wadi Arah, rises to an elevation of 1,100 ft., and descends to Esdraelon at Megiddo. When the Philistines returned the ark to the Jews, it was placed on a wagon drawn by oxen and routed through the wadi, or Vale, of Sorek. The railroad from Lydda to Jerusalem today follows the same valley road, utilizing the course cut by streams seeking an easy descent to the sea. Jerusalem is almost bounded by wadies which here are of sufficient size to be called valleys—on the east by the Kidron and Jehoshaphat valleys and on the south and west by the valley of Hinnom (see map of Jerusalem).

Many westerners are puzzled about what constitutes a "wilderness" in these lands. Visions of vast forests must be excluded. The Wilderness of Judaea, except for a few weeks in early spring when it is carpeted with gorgeous wild flowers, is a dry, barren waste (illus. 135). The soil is of porous limestone. The water quickly drains off, and the result is a desolation void of life and vegetation giving the appearance of a pock-marked lunar landscape. When

the scapegoat was liberated in such terrain, the end of its life was inevitable, even as the Jews in their dramatic ceremonials believed that sin forgiven would be ended forever.

Illustrations 130, 133, 134, 131 show the chief plains of Palestine: Sharon, Esdraelon, Gennesaret, and Hattin. The latter lies at the foot of the Horns of Hattin, a site suggested as the Mount of Beatitudes.

"UPS" AND "DOWNS" OF PALESTINE

The little words "up" and "down" make the Scriptures as picturesque as a relief map. They give clues as to the location of the writer. Only a man already in the hill country of Palestine would refer to going "down into Egypt" (Gen. 12:10; 46:4). The function of the following phrases in the Bible is to express accurately the facts of geography in this extraordinary land and furnish evidence as to the trustworthiness of the record: "down from Jerusalem to Jericho" (Luke 10:30); "down to Capernaum" (John 2:12); "down unto Caesarea" (Acts 25:6); "down from Judaea to Caesarea" (Acts 12:19); "Behold, we go up to Jerusalem" (Luke 18:31). Luke in his Gospel and in the Acts, especially, records the "ups" and "downs" in Palestine. Stranger to Palestine, as we believe he was, this Greek was so impressed, as all visitors are even today, with the land's topography that he faithfully records details which Matthew because of his familiarity with his country fails to mention. Owing to this wide range of altitude, some Palestine sections have sub-tropical temperatures; areas like the Ghor and the Dead Sea experience tropical heat; while the high mountain elevations enjoy the coolness of a temperate climate. The climates of a continent are here represented in a tiny province to meet the geographical conditions suitable to an acceptable world religion.

PHOTOGENIC JERUSALEM

The Psalmist recognized the photogenic quality of Jerusalem.

Beautiful in elevation, the joy of the whole earth

Is Mount Zion on the sides of the north,
The city of the great King.

—Ps. 48:2

Who has not thrilled at the first sight of sprawling Jerusalem when approached by automobile on the road from Samaria, Nazareth, and points north? The most dramatic view, however, is from the east where the Mount of Olives, 200 ft. higher than the walled city, serves as the tripod for a close-up telephoto impression of the "city of the great king" (illus. 166). This was the scene which no doubt accompanied those words of Jesus when, journeying to Jerusalem from Bethany, he reached this western descent of the Mount of Olives and beheld the city which would crucify him. "O Jerusalem, Jerusalem that killeth the prophets, and stoneth them that are sent unto her! how often would I have gathered thy children together, even as a hen gathereth her chickens under her wings, and ye would not!" (Matt. 23:37). One night the authors walked from Jerusalem over to the Mount of Olives to enjoy the stars and the shadowy Garden of Gethsemane. The city in amazing panoramic nearness lay over against us. Lights in a thousand homes twinkled, not as brilliantly as the stars overhead but with the warmth of love, home, and family life behind them. At that time there came a new poignancy to those words concerning him who had no place to lay his head and denied himself a home and family to travel the long, long road to the cross: "They went every man unto his own house: but Jesus went unto the Mount of Olives" (John 7:53; 8:1) (illus. 168). Geography supplies the true emotional color to such a passage of Scripture.

CARMEL CONTEST AND H. M. S. "REPULSE"

On Sunday morning, July 24, 1938, one of the authors of this book attended divine service on H.M.S. "Repulse" as it lay at dock in Haifa harbor. Canvases were stretched aft on the deck of this mighty British battle-wagon; huge 12-in. guns extended like rafters under the canvas and over the heads of the ship's officers and crew who assembled for worship. (The "Repulse" was sunk by the Japanese off the coast of Malaysia on December 10, 1941, with great loss of life.) That July church service was most impressive and

represented British religious spirit at its best. The captain read the Scripture lesson. Without any omissions he read with intelligent familiarity every one of the forty-five verses of I Kings 18. The men under such commanding leadership followed eagerly the details of the narrative of Elijah's contest with the priests of Baal on Mount Carmel. After prayers and a hymn led by the band the chaplain took over. He, too, knew his Bible, as well as the geography of the section. Haifa is built on a northeastern slope of the Carmel Ridge where it plunges into the sea (illus. 125). The chaplain pointed to the Carmelite monastery near the top of the headland, said to be built over the cave where Elijah once lived. Then he drew the attention of his men to a point a few miles down the ridge where, according to tradition, the trial of faith and fire took place. As he continued to narrate the dramatic episode involving King Ahab, the prophet Elijah, and the defeated priests of Baal, the congregation was able to see under the guns of the "Repulse," on the distant eastern shores of the bay, the mouth of the River Kishon along whose banks the priests had met their death. Chaplain J. R. Scarff of the "Repulse" that day used the environs of Haifa harbor not only for purposes of Christian education but for deepening the allegiance of his hearers to God and the eternal realities of the spirit. Among the sites constantly employed today by religious-minded pilgrims who find that here geography deepens faith are the Shepherds' Field below Bethlehem (illus. 185), the unconventional Armenian Garden of Gethsemane, the slopes of the Mount of Olives facing Jerusalem (illus. 166), fishermen's boats for hire on the Sea of Galilee (illus. 162), and the rocky mound of Mars Hill in Athens (illus. 243). Informal religious services are frequently held in all these places.

THE TOPOGRAPHY OF THE PROMISED LAND

JOSHUA'S CANAAN

The Book of Joshua, chapters 13-21, is the most "geographical" section of the

Old Testament. It is a detailed description of Palestine as it was divided among the twelve tribes. Robert H. Pfeiffer says: "Although the topographical information contained therein is worthless for the time of Joshua, it is nevertheless valuable. P's description of Canaan, dating from the fifth century B.C. but employing earlier data, is the earliest and most detailed available." This ancient Baedeker has provided generals like Napoleon and Allenby, geographers, archaeologists, and travelers in every century with accurate information.

MOSES' VISTA FROM PISGAH

On one of their visits to Palestine the authors motored to Mount Nebo in Transjordan, associated with the last days of Moses. The Israelites on the final lap of their wanderings had by their approach from the east risen gradually on the plateau of Moab to the ridge, two miles long and one-half mile broad, which suddenly drops 2,600 ft. down to the Jordan Valley. The topography gave them a breath-taking view of the Promised Land, the first sight of their future home and the last and only survey ever permitted Moses. We stopped our car on the rock trail which was called a road, about 200 ft. below the surveyor's stones marking Mount Nebo. Alone we climbed to this height, seeking the silence and the solitude of such a sacred historic spot. But before we arrived at the stone marker, we were joined by three Arabs in rust-colored abas who sprang from nowhere and proceeded to take charge of our obvious itinerary. They were friendly fellows who, while tending their flocks of camels, had spied our approach and proceeded to make themselves indispensable. "Here Nebo, Moses he sleep," the eldest said, as the younger man proceeded to illustrate with folded hands and inclined head the pose of the recumbent Lawgiver. "There, on Ras Sidehah (Pisgah) Moses look. Moses he, no go Jerusalem. He sleep here, Nebo." Mount Pisgah, 200 ft. below Mount Nebo, at the termination of this peninsula-like plateau which drops down into the Ghor, unmistakably offered Moses the view par excellence, which the Scripture discriminately declares. All the generalizations of Deut. 34:1-3 were before

us. Imagination had to supply for us, as well as for the ancient writers, the location of the Mediterranean Sea in the west. Our unsolicited guides added some specific details to the Bible narrative. They pointed to Bethlehem; and to the towers on Olivet's Mount of Ascension, 2,600 ft. above sea level. To the north we saw the mouth of the wadi, where the Brook Cherith flows into the Jordan. Beyond were the hills of Samaria and Galilee, and still farther north the towering Lebanons and snow-capped Mount Hermon, hidden in summer mists. That drop of over 1,300 ft. from the top of the Judaean hills to the depths of the Jordan Valley, with its twisting ribbon of green foliage and the hot-looking Dead Sea dancing with mirages, can be compared only with America's Grand Canyon and similar breath-taking phenomena of the earth's surface (illus. 125). As we stood enthralled, an airplane overhead intoned its modern chant over one of the Bible's unchanging scenes. During World War II a specialist in religious education on his way back to America after completing his mission of mercy in China wrote us: "On the long journey from China, just a few days before Christmas, we flew over the Jordan Valley and landed on the Dead Sea. We could see Jerusalem and the hills of Bethlehem beyond. Nineteen hundred years ago Joseph and Mary were traveling over these same hills on that long, tiresome journey from Nazareth. It took them days. It took us minutes. But those days ended in the birth of Jesus Christ, the Prince of Peace."

GEOGRAPHY AND JESUS

The geography of Palestine influenced Jesus. Living at Nazareth with Megiddo, the "Gettysburg" of the Jewish people, just over the hills from his boyhood home, he formulated the law which characterizes war, as "all they that take the sword shall perish with the sword" (Matt. 26:52). Many of his utterances received dramatic emphasis, as, when conversing with the woman at the well at Sychar, he pointed to near-by Mount Gerizim, the Holy Mount of the Samaritans, and said, "Neither in this mountain nor in Jerusalem shall ye worship the Father" (John 4:21). Great

sermons by famous divines have been based on such suggestive geographical phrases of the Gospel narratives as "and he must needs pass through Samaria" (John 4:3); "He steadfastly set his face to go to Jerusalem" (Luke 9:51); "Go tell my brethren that they depart into Galilee, there shall they see me" (Matt. 28:10).

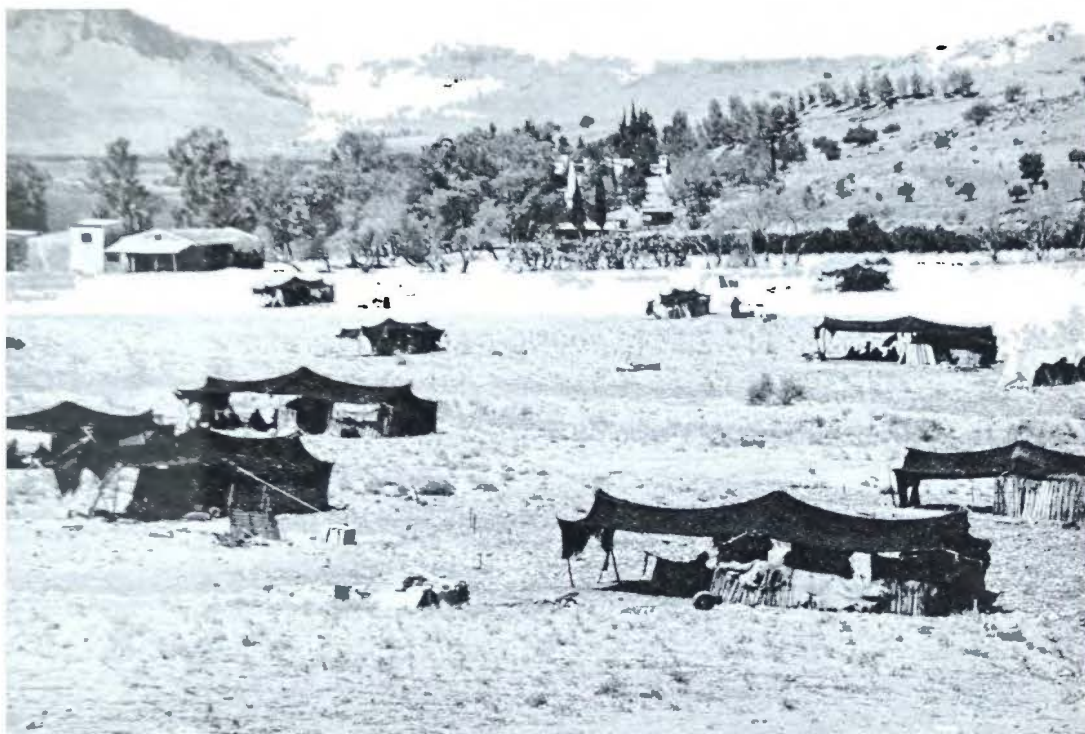
JUDAEAN PROGENITORS

But even more challenging to study are the geographical forces which vitally contributed to the nature of Christ through his progenitors. Matthew and Luke emphasized the Judacan origin of Jesus. Both genealogies, that of Matt. 1:1-16, recorded from the standpoint of Mary, and that of Luke 3:23-31, from the standpoint of Joseph, aim to identify Jesus with the lineage of David. The journey of Mary and Joseph from Nazareth back to Bethlehem so that Joseph might enroll "in his own city" in obedience to the edict of Caesar Augustus further substantiates the Judacan origin of Christ's family tree. Matthew uses Old Testament quotations from Judaea's prophets (Matt. 2:6), and Luke records utterances of those contemporary with Jesus (Luke 1:69) to emphasize the importance of Christ's southern Palestinian birthright. Geography furnished certain definite influences making possible the birth of the Son of Man in this region.

Judaea, because of its mountains, had a greater degree of security than any other section of Palestine. The brief survey of this section of Palestine earlier in the chapter has pointed out her natural bulwarks. The Philistines, in spite of their superior military implements, were never able to overrun Judaea. Its ravines, caves, and mountain defenses were barriers which could be held by David's guerrilla warriors. Even today the streets of old Jerusalem, faithful to its earlier pattern, are too narrow for wheeled vehicles (illus. 196). Chariots, the ancestors of the modern tank, were never extensively used in the hill country but were confined generally to such level terrain as the Maritime and Esdraelon plains. While mountains did not eliminate all wars from Judaea, history records how Jerusalem was repeatedly exempt from invasions. Alexander the

Great en route to Egypt sat seven months outside Tyre in an obstinate siege, and when it fell, 30,000 Phoenicians were taken as slaves. Gaza after two months of resistance met a similar fate. Judaea and Jerusalem high up in the protected hills were not visited by the Macedonian conqueror. The military strategy employed by Vespasian, Saladin, and Allenby dictated that these heights had to be approached on three sides before the capture of Jerusalem was possible. It was militarily a costly and long-drawn-out process. And then what? Judaea was not always worth the effort. The great military invaders of antiquity looked upon Judaea as a chest with little in it (II Kings 24:13) except the temple treasures and palace trophies such as Shishak of Egypt carried off (I Kings 14:25, 26). The archaeological finds in Palestine consist largely of potsherds and domestic implements, valueless except to scientists. No rich Tut-ankhamun treasures of gold and jewels have been found in the Holy Land. Judaea is comparable to the rocky farms of New England. Why should invaders waste time contending against people who were so well protected by nature and had little in riches and stores to give up when subdued?

The sum of all these complex factors developed a security-loving quality of character which was hardy, courageous, and continuous. The northern Kingdom, centering in the domains of Ephraim, Manasseh, and Issachar, was not only more fertile but more easily overrun and had much to offer an invader. Ahab and Herod had their palaces here in the lap of Israel's natural plenty. Amos, born at Tekoa in Judaea, was horrified at the luxury of ivory palaces and the golden prosperity of the north as compared with the simple life of hardship and hard work in which he had been reared. These factors account for the early fall, captivity, and destruction of Israel by the Babylonians. However poor the grain harvests, Judaea's crop of spiritual seers never failed. The roll call of prophets, poets, and patriots who were born among or ministered to the Jews of Judaea is as follows: in the eighth century B.C. Amos, Isaiah, and Micah; in the seventh century Zephaniah, Nahum,



134. Plain of Gennesaret, with its tent colony of bedouin farmers. At left corner is the Sea of Galilee. At top, in the distance near center, the Horns of Hattin.

135. Wilderness of Judaea, looking like a lunar landscape. Here Jesus withstood temptation. And here the scapegoat in Jewish Temple ceremonials was released to die for the sins of the people.



Habakkuk, and Jeremiah; in the sixth century Ezekiel, the Second Isaiah, Haggai, and Zechariah; in the fifth century Malachi and Obadiah; in the fourth century Joel. The northern kingdom numbered among her seers only such names as Elijah, Elisha, and Hosea. Such local geographical considerations are extremely vital in any appraisal of the Jewish backgrounds of Jesus.

Jerusalem was captured by Nebuchadnezzar in 586 B.C. (II Kings 24:10-25). The northern kingdom had been destroyed and its people dispersed 136 years before. Able-bodied men who had come from all sections of Judaea to help defend the capital were taken to Babylon. Psalm 137 expresses the early despondency due to this geographical change. But the sturdy religious vitality of the physically hardy group persisted. Jewish practices such as circumcision, fasting, observance of the Sabbath, and prayer were faithfully preserved. The study of the Scriptures, the multiplication of sacred books, and the growing importance of the scribes were all a part of the Captivity period. This adversity only deepened Jewish patriotic and religious feelings. To the highlanders of Judaea the experience was merely hardship in another form. In catastrophe they were being schooled for the cross.

In 538 B.C. Babylon fell before the prowess of Cyrus of Persia. This new conqueror, a devotee of Zoroaster and his religious tolerance, knew the folly of trying to enslave by force alien peoples and so permitted the Jews who desired to return to Judaea to do so. Many were as unwilling to leave Babylon, where they had in fifty years become deeply entrenched in lucrative business, as some American Jews are to leave the United States even for their Zionistic dreams in modern Palestine. Those who did return under Nehemiah and later leaders rebuilt the temple, instituted marriage reforms in the interest of preserving the integrity of the Jewish race, and kept the fires of faith burning on the hills of Judaea. From such a continuous stream of religious influence and faith, rising from the tribe of Judah, the southern kingdom, came Jesus Christ. "In the fullness of time" and by no geographical accident Jesus was born in Bethlehem

of Judaea of the house of David in c.6 B.C.

THE INEXPLICABLE CHRIST

With all these geographical factors there remains, however, much that is unaccounted for in Jesus. He was so very much greater than the best of his race or his progenitors. He not only "breaks through language and escapes," as the Victorian days of rhetoric and polished phrase said of him, but, in these times of biological analysis, sociological theory, and geographical study, science fails to explain him. Science is always confronted with, and forced to acknowledge, her limitations. She does not pose as the great "know-it-all." She goes so far and then stops before the Unknown which often remains the Unknowable. Mark has nothing to say about the birth or origin of Jesus. The explanation of the personality whose work he so painstakingly described was beyond his power to analyze. In spite of all Christ's superior qualities which the first Gospel, especially, was glad to relate to the Jewish race and the tribe of Judah, there was something about him which was superracial, superhuman, incapable of explanation. Even the physician Luke with his knowledge of the ordinary processes of birth did not accord Christ an ordinary origin. The apologetic value of the story of the Virgin birth in both Matthew (1:18-25) and Luke (1:26-56) is found in their realization that Jesus was greater than what geography or his gifted race alone could produce. This story of his supernatural origin corresponds perfectly to the element of mystery and the inexplicable which science not only admits is in the personality of Christ but is still all about us in this scientific age, just beyond our known ways. Therefore, just as the genealogical trees in the Matt. 1:1-16 and Luke 3:23-38 correspond to our acceptance of geography as making a contribution to Christ, just so does the story of the Virgin birth convey the conviction that beyond the scientific knowable factors in his origin there was the participation of something superscientific—the unknowable, the inexplicable, which John called "God" (John 1:1-14). "The word became flesh."

ADDITIONAL BIBLE REFERENCES

"a river went out of Eden" (Gen. 2:10)

"as they journeyed from the east, they found a plain in the land of Shinar; and they dwelt there" (Gen. 11:2)

"we journeyed from Horeb, and went through all the great and terrible wilderness which ye saw . . . and we came to Kadesh-barnea" (Deut. 1:19)

"the Arabah beyond the Jordan eastward, even unto the sea of the Arabah, under the slopes (or springs) of Pisgah" (Deut. 4:49)

"between the passes, by which Jonathan sought to go over unto the Philistines' garrison, there was a rocky crag" (I Sam. 14:4)

"The mountains rose, the valleys sank down" (Ps. 104:8)

"at Michmash he layeth up his baggage; they are gone over the pass" (Isa. 10:28-29)

"This very day he shall halt at Nob; he shall shake his hand at the mount of the daughter of Zion, the hill of Jerusalem" (Isa. 10:32)

"besought him that he would come down [to Capernaum], and heal his son" (John 4:47)

"Jesus went up to Jerusalem" (John 5:1)

"He went through Syria and Cilicia, confirming the churches" (Acts 15:41)

"Come over into Macedonia, and help us" (Acts 16:9)

BIBLIOGRAPHY

East, Gordon, *The Geography Behind History*, London School of Economics, Thomas Nelson & Sons, London.

Garstang, John, *The Heritage of Solomon*, Williams & Norgate, Ltd., London.

Glueck, Nelson, *The River Jordan*, Westminster Press, Philadelphia.

Grant, Elihu, *The Economic Background of the Gospels*.

Loudermilk, Walter Clay, *Palestine, Land of Promise*, Harper & Brothers, New York.

Newbigin, M. I., *The Mediterranean Lands*, Alfred A. Knopf, New York.

Pfeiffer, Robert H., *Introduction to the Old Testament*, Harper & Brothers, New York.

Semple, E. C., *The Geography of the Mediterranean Region*, Henry Holt and Company, Inc., New York.

Smith, George Adam, *The Historical Geography of the Holy Land*, A. C. Armstrong & Son, New York.

Wavell, Archibald, *Allenby—A Study in Greatness*, Oxford University Press, Oxford.

Willkie, Wendell L., *One World*, Simon and Schuster, Inc., New York.

Wright, G. Ernest, and Filson, Floyd Vivian, *The Westminster Historical Atlas to the Bible*, The Westminster Press, Philadelphia.

HOMES

And they went unto their own home.

—I Sam. 2:20

Introduction

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Inner Recesses

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Greek and Roman Homes

An Ancient Persian Home

An Egyptian Palace-home

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INTRODUCTION

Man in Palestine today still uses every principal type of shelter occupied in Bible times: the grotto-home inherited from prehistoric people, the hairy tent of the wandering shepherd like Abraham, the leafy booths enjoyed in summer harvest fields, the mud and clay-brick village home of the lowlander, and the courtyard or cubical type of stone house erected by the highlander.

Successive excavations by a galaxy of brilliant archaeologists and palaeontologists have piled up recent information about the homes of man in Palestine since before the dawn of history. This information is a part of what C. C. McCown calls "the most complete and continuous picture

of human history available." Man appeared in Asia before he reached Africa and Europe. The same river valleys, the Tigris-Euphrates and the Nile, which are associated with man's early gropings after God have also given us records of his earliest homes. Bethlehem, birthplace of Jesus, has in its vicinity some of the earliest caves occupied in Palestine, with traces of animals from the first ice age and tools possibly from the hands of pre-Chellean man (c.100,000 or 125,000 years ago). William F. Albright believes that the first "stone artifacts" or tool-worked stone thus far found in the Near East must be at least 200,000 years old, dating from before the time of the earliest cave dwellers whose relics have been discovered thus far.

Grottoes in the Judean hills and in the

hills of Galilee near Nazareth are still used for homes by very poor families, although such abodes are becoming exceptional with the development of motor highways and improved economic condition of the peasant fellahin. Perhaps Joseph's family had a Nazareth cave for shelter or for a lower story where animals were folded.

CAVE-HOMES

The archaeology of Bible lands carries us back far beyond "the time when man made any dwellings at all," according to Millar Burrows (see *What Mean These Stones?*). No scholar presumes to set a date for the first river-terrace cave-home in the Middle East. Possibly 150,000 years ago primitive man drove out prehistoric animals from caverns they had occupied. There he set up his Palaeolithic household at the time when mind, art, and industry were dawning upon beetle-browed humanity. The first short, stumpy tenants of caverns along high wadies, or streams, in the hill country of Palestine had not even learned to shape natural stones for convenient tools. They used hammer-shaped stones for hammers and knife-shaped stones for knives. With rounded stones they ground on a larger, saddle-shaped stone the grain they were beginning to cultivate.

However, the real cave-home period in Palestine began in the Palaeolithic Age. We feel better acquainted with families of this period, for they have left evidence of their activities. They were hunters who spent most of their time in the open, along the Maritime Plain or along the Sea of Galilee. They were beginning to farm. But in rainy, cold seasons they took to the rust-colored dolomitic limestone cliffs of Mount Carmel, for example, or those at Gezer. At Lachish in southern Judaea families had cave-homes in the Early Bronze Age (2500 B.C.) near the later city site of the frontier fortress-town of Lachish, besieged by Nebuchadnezzar.

INTERIOR OF CAVE-HOME

The interior of an average cave-home was about 30 ft. wide and 6 ft. high. Nature's dimensions were not improved upon

unless a clan grew too large for comfort in the cliff apartment. But sometimes the energetic Neolithic headmen chipped off the damp, cheese-like walls of their cave homes with hammers and made extra chambers or passageways.

FEATURES OF THE CAVE-HOME

Entrance was occasionally by means of hole in the top of the cave, from which crude, narrow steps led down into the interior. Yet usually, as in the famous Cave of the Valley (Mugharet el-Wad) described below, we found a high front central door with two window-like openings, the left one of which had been made into an additional door, probably in the Middle Ages.

Protection for the cave family was provided by a stone wall barricading the entrance. (See foreground of accompanying picture of Mugharet el-Wad, for masonry of Natufian man's wall defending his cave home.) Human enemies and prowling animals respected such defense, especially when torches were lighted in the near-by entrance. Certainly, one of the greatest advantages of cave dwellings was the sense of rocky security they gave. Little wonder that the Crusader architects, building their palace at Athlit three miles north of Mugharet el-Wad in the thirteenth century, gave their structure a free-standing façade facing the Mediterranean but ran the back wall straight into the solid rock. The sea protected them from the front and nature's limestone bulwark from the rear.

The *hearth* of the cave family was at the opening of the grotto where smoke could escape. Or it was just beyond the threshold, where women sewed with bone needles, making animal pelts into garments and coverings, where they cooked the food, nursed their children, and made their first crude bead ornaments. Men there worked flints for hunting and early agricultural efforts. The *inner recesses* of the cave were not popular for family use. They were too eerie but were useful as storage places for grains, meat, and fish. And priests used the secluded corners for their cult rites. At Gezer the inner portions of caves were used for cremation of the dead;

bits of charred bone and vestiges of cinder have been found there where non-Semitic people had lived.

REVELATIONS FROM MOUNT CARMEL CAVE-HOMES

Spectacular information about details of Palestine cave life has been found by Theodore McCown in the Cave of the Kids on Mount Carmel, which yielded skeletons of several huge Palaeolithic men (c.100,000 years ago), and by Dorothy Garrod and her associates in the series of caves at Wadi el-Mugharah (Valley of the Caves) south of Haifa (see Vol. I of Joint Expedition of British School of Archaeology in Jerusalem and American School of Prehistoric Research, Dorothy A. E. Garrod and Dorothea A. M. Bates). Dorothy Garrod's sequence of discoveries in the cliff only 250 ft. above the little andlocked plain along the Sea of the Ancients is one of the most romantic chapters of cave life in the world. Priority of information about Neanderthal man has shifted from Europe to the Middle East.

When quarries south of Haifa along the ridge of Mount Carmel were being tapped for stone to build the harbor of this new port of Palestine, E. T. Richmond, Director of Antiquities, suspected from evidence on the terrace in front of a series of cave openings that rich material might be found within. For several seasons Miss Garrod and her staffs investigated and were rewarded with finding not only enough Natufian vestiges (c.10,000 years old) to establish the link between Neanderthal man and modern man (*Homo sapiens*), but also thirteen culture levels giving the sequence of Stone Age chronology from the Thysian Age on.

Three openings of Wadi el-Mugharah lead into the Mugharet el-Wad (Cave of the Valley), the Mugharet es-Sukhul (Cave of the Kids), and the Mugharet et-Tabun (Cave of the Oven). The first of these three appears in illustration 136. In it the remains of cultures from recent and Bronze Age periods down to the Upper Levallois-Mousterian (c.40,000 years ago) have been found. One of the choicest treasures is a remarkably fine

young fawn carved on the end of a bone arrow-straightener. All sorts of Natufian flint scrapers, sickle blades, borers, and picks were found in layer B of this period. Prolific finds in bone points for awls, and harpoons, sickles with carved bone handles, and pendants and necklaces of bone have been made. Dramatic evidence of primitive people's taste for personal adornment has come forth from skulls still wearing their headdress of dentellium shells, and necklaces of similar material—articles looking oddly like costume jewelry on sale today in American shops, yet made in the Upper and Lower Natufian Age. A necklace of bone pendants lying below the angle of an ancient human jaw in a Mount Carmel cave shows how man was beginning to grope after the artistic.

The arrangement of "rooms" in the Cave of the Valley at Wadi el-Mugharah is revealing. The first chamber in these crystalline limestone cliffs is about 30 ft. by 45 ft. This opens into an inner room measuring 30 ft. by 24 ft. The latter opens into a deep alcove and a lofty corridor extending 200 ft. into the shoulder of Mount Carmel. At its inner end the corridor widens into four more chambers. The roof of the whole was about 30 ft. high from floor to ceiling before excavation of the successive layers of occupation had begun. What use the family made of these spacious chambers we can only conjecture. The presence of an intermittent spring inside the cave made it especially desirable for habitation by men of the Old Stone Age and later tenants, whose hearth fires are indicated by charcoal fragments recently found. No wonder this cave is considered the key to the prehistory of the entire Middle East. And, in the Cave of the Kids on Mount Carmel, Theodore McCown has found eight giant human skeletons dating from c.50,000 years ago. *Paleanthropus Palestinus* is the name given these Carmel men.

The Cave at Shukba in western Judaea is also a Palaeolithic shelter of man.

Walls of cave-homes were usually left without decoration, although crude graffiti, or frescoes, have been found in the Gezer caves. They show men plowing, an animal among reeds, and various cave customs. Palestine cave artists evidently did not

attain the high artistic excellence of Cro-Magnon men, who painted their cave walls with bison and reindeer in France. The extensive caves at Beit Jibrin between Bethlehem and Lachish in southern Judaea, which were used as late as Crusader times (thirteenth century) bear Christian symbols and inscriptions, as do the Zakariya caves at Khirbet el-'Ain which are adorned with Christian crosses.

Furniture could not be expected in the early cave-homes. Yet a rock-cut divan has been found in the important Caves of Ophel under the southeast brow of Jerusalem's plateau near the historic fountain which became the Virgin's Fount or Pool of Gihon. Water may have attracted the first cave people to this historic site later walled by the Jebusites, whose fortifications David breached and repaired after his conquest, as we see by courses of stone uncovered there in our own time. In one Ophel cave Captain Parker found pottery dating not later than 2500 or 2000 B.C. These vessels were made by Amorites who by that time were advanced enough to live in fenced cities and who employed the caves not as homes but as burial places or storage centers. Pottery was made by men of the New Stone Age (Neolithic) for water jars and cooking pots. When unbaked it looked like ground meal and was called by its discoverers "porridge ware," dark-gray in color, with chips of flint and quartz embedded. One layer was placed upon another until the desired size was reached. Cave people living about 3000 B.C. were "combing" designs onto their ware with wooden or bone combs whose teeth made parallel lines. The rose-covered vessels of Bronze Age Cyprus are examples, one of which is treasured by the authors.

BIBLICAL CAVES

The Old Testament speaks of no families living in caves, except in emergency, as was the case in the story of Lot (Gen. 19:30), or of Elijah's flight to a cave on Mount Horeb (I Kings 19:9), or of David's hiding in the Cave of Adullam (I Sam. 22:1). When once Palestine man had left his cave-home, he returned to it only in time of siege or in the course of his own advance on enemy territory, as at

Gezer, Jerusalem, or the Amorite forts in the Plain of Esdraclon (see Duncan *Digging Up Biblical History*). The remarkable escape of Jesus from those who tried to toss him headlong out of hill Nazareth (Luke 4:29-30) may be explained by his use of a Galilean cave familiar since boyhood.

People east of the Jordan continued to use rock shelters at the south end of the Dead Sea. We read in Gen. 14:6 that the Horites (now believed to be Hurrians) lived in "their mount Scir, unto El-paran which is by the wilderness." To the mountain of these cave dwellers Esau in patriarchal times is thought to have fled, and from their lairs his descendants (Deut. 2:12) "succeeded" after driving out the Horite cave tribes. It was to Mount Hor that Moses led Aaron on the eve of his death and there invested Elcazer with Aaron's priestly robes (Num. 20:26).

Cave dwellers in the rose-red rock-cut city of Petra, between Mount Seir and the Red Sea, continued to occupy their unique troglodyte city down to the 5th and 6th centuries before Christ and on into Roman times. They dominated a rich trade-route intersection of caravan trains and amassed wealth comparable only to that of the desert port, Palmyra. Behind the remarkable rock-cut tombs and theaters erected by these Nabataean cave dwellers in Graeco-Roman times, there runs a fascinating thread of history going back to the caravan-controllers of Moses' time, who "visited their brethren, the children of Esau," and pleaded with the King of the Edomites to let the wandering Hebrew tribes pass through his land along the "king's highway" without turning aside right or left, or even using the wells for their flocks. But the King of the Edomites was as adamant in his control of the passage (Num. 20:21) as modern Turkey is at the Dardanelles. Mrs. Stuart Erskine's *Vanished Cities of Arabia* has interesting material on Petra cave-homes.

Dungeon-caves were quarters of prisoners. Jeremiah was kept in a cell of "the dungeon house" of King Zedekiah at Jerusalem for many days, until the monarch sent for him to tell whether he had received any communication from Jehovah (Jer. 37:16, 17). Dry cisterns were also

used as places of confinement. The same prophet was "let down by cords" into the "dungeon of Malchijah the king's son, that was in the court of the guard" (Jer. 38:6). This Jerusalem dungeon may have been like one we saw in Cairo—formerly a well. Yet out of the dungeon depths, Jeremiah exclaimed something like the Psalmist's words,

He brought me up out of a horrible pit,
out of the miry clay;
And he set my feet upon a rock, and
established my goings.

—Ps. 40: 1, 2

A "Grotto of Jeremiah" is shown in Jerusalem today beneath "Gordon's Calvary." We have found it damp enough to be congenial to the teary prophet.

Caves as places of worship were used in earliest times. Long before Phoenicians used their coastal caves for worship centers of the Venus and Adonis cult, and long before the Italians at Cumae and Delphi heard oracles spoken by priests whispering from one cave to another to give to credulous believers the awesome oracles, cave dwellers in Palestine were worshiping in underground shines at Gezer. And, as we have said above, Neolithic families were cremating their dead and burying them in the caves where they continued to live.

The sepulchre in the cave-home is indicated at Wadi el-Mugharah, where infant and adult skeletons were found buried in extended form, head to foot, in the Natufian period. Another technique was the group-burial technique by which the dead were buried in tightly-flexed positions. Evidence has also been found that inner recesses, shunned by light-loving families, were used by priests for religious ceremonies. The presence of mysterious rock-cut "cups" at Ophel and of steps for the Canaanite priest in his high place leads one into interesting speculation. Similar cups appear at Gezer; these were used for blood of sacrificed victims or possibly for pressed olives and wine. And near Beit Ta'amir, six and one half miles south of Jerusalem, other Neolithic cup markings are of religious significance. The rock-cut cups out on the terrace of the Cave of the Valley are claimed by Dorothy

Garrod to be the earliest known in Palestine, from the Chalcolithic and Early Bronze ages. What was their use? Who can guess? Megiddo on the Plain of Esdraelon has similar cups, probably for culinary purposes. Those at Carmel seem part of priestly burial customs.

Especially in Judacan mountain sections, both natural and artificial caves were used for burials through Bible times.

The Cave of Machpelah near Hebron was bought by Abraham, the Friend of God, from Ephron the Hittite as a burying place for his wife Sarah. "So the field of Ephron, which was in Machpelah, which was before Mamre, the field, and the cave which was therein, and all the trees that were in the field . . . were made sure unto Abraham for a possession . . . before all that went in at the gate of the city" (Gen. 23:17). This double cave has continued for almost 4,000 years to be one of the most sacred sites for Hebrews. For several centuries, Moslems have venerated it. Archaeologists wait eagerly for the time when they will be permitted by Moslem authorities to excavate the material they expect to find in the upper and lower caves of Machpelah.

In New Testament times caves continued to be used as tombs. We are told definitely in John 11:38 that the sepulchre of Lazarus to which Jesus came "was in a cave, and a stone lay against it." Cave tombs like that of Lazarus are shown visitors today at little Bethany. Possibly the garden tomb of Jesus himself had once been a cave in the plateau of Judaea, adjacent to the ancient city whose Kidron Valley then was lined, as it is today, with elaborate ancient mausoleums set into the slope of the valley of Jehoshaphat. To be buried in this valley was the desire of every Jew, looking to fulfillment of Joel's prophecy that the Messiah would come here to judge faithful and unbelievers (Joel 3:1). Various names have been associated with these tombs in the hillside from century to century: Absalom, James, and Jehoshaphat, whose tomb is really a sepulchral cavern. Behind the Tomb of Zechariah a cave runs 40 ft. or more under the mountains.

Whatever their date of origin, these

rock tombs appear to be among the very few extant structures which Jesus saw when he descended the Mount of Olives and wept over the city, or when he looked down over the tomb valley from the platform of the Temple Area, noting "whited sepulchres, full of dead men's bones."

Other caves of Palestine which have yielded interesting information on the prehistoric phases of man are at Tabgha on the Sea of Galilee and at Zikhron Ya'aqov on the Plain of Sharon.

TENT-HOMES

"Houses of hair," as desert folk call their tents, have always been a picturesque feature of Bible lands. Through the long years of Israel's efforts to win their place in the Promised Land, tribes under Moses' leadership "encamped in the wilderness" between stages in their trek from Egypt. Their worship center was the tent of meeting, and a Tabernacle contained the sacred ark of the covenant which held the tables of the Law (Ex. 40:19-35).

Long after the Hebrew families had ceased to be roving herders and had begun to live in little agricultural villages, they returned to their well-loved tents during summer harvest seasons; or they built tent-booths on their roof-tops for comfort. Delights of tent life revived deep memories of their racial experience. Palestine farm families today take to their tents on the edge of vast acres of golden grain waiting to be threshed. Tent villages spread below their winter towns on walled hilltops near-by, as we see in eastern Palestine's high tablelands which were occupied by Israelites before they crossed the Jordan into the Promised Land (c.1290 B.C., according to Albright).

Archaeologists believe some of the first stationary homes in Palestine were in Jericho, in the fifth millennium B.C. Nelson Glueck has found proof of buildings erected on virgin soil in the century which also saw the first fortress at Kadesh-barnea. In Edom, Glueck found evidence of sedentary occupation as early as the twelfth or thirteenth century B.C. For description of homes of copper- and iron-ore workers of the tenth to fourth century

B.C., on the Gulf of 'Aqabah at Ezion-geber, naval base of Solomon, we are indebted to Nelson Glueck.

MATERIALS

The hair house we see in desert sections of Bible lands today conforms to the type used through forty centuries (illus. 137). It is made of heat- and water-resisting hand-woven goat's-hair material which shrinks itself taut with the rain. Goat's hair, together with woven reed cloth, is the oldest household fabric used by the Hebrews; sheep's wool being used for garments. Weaving usually follows sheep- and goat-shearing time when enough hair accumulates to make possible a wholesale output of material. Old tents are then patched patiently and, if the family has grown, or if new sets of relatives have joined the encampment, new tents are set up. The cloth is dark-brown or black; hence the saying, "black as the tents of Kedar" (Song of Sol. 1:5). Addition of fresh material gives a striped effect when sun has baked the original to a golden brown.

In early Bible times the women of every family wove the tent cloth in narrow strips on homemade looms (illus. 191). Millar Burrows in his book, *What Mean These Stones?*, says that stone spinning whorls and loom weights of stone and clay have frequently been found in excavated deposits of settlements from the Early Bronze Age.

The Apostle Paul is the most famous maker of tent cloth in Bible lore. His native town of Tarsus in Cilicia was noted for its *cilicium*, or goat's-hair cloth. As a boy Paul learned to weave it adeptly. And as a man this trade served to support him and others while he devoted his leisure to preaching the gospel of Christ. The making of the coarse cloth used for shoes, tents, sails, mats, and coverings of all kinds led to that blackening and coarsening of the Apostle's hands to which he refers in Acts 20:33-35: "Ye yourselves know that these hands ministered to my necessities, and to them that were with me." Paul, like every obedient Jew, had to purify himself after the ceremonial pollution of handling goat's hair: "as to



136. Cave-homes on western slope of Mount Carmel near Haifa, at Wadi el-Mugharah. Natufian families lived here 10,000 years ago.

137. Tent-home of bedouins, primitive nomads, along the Dead Sea.

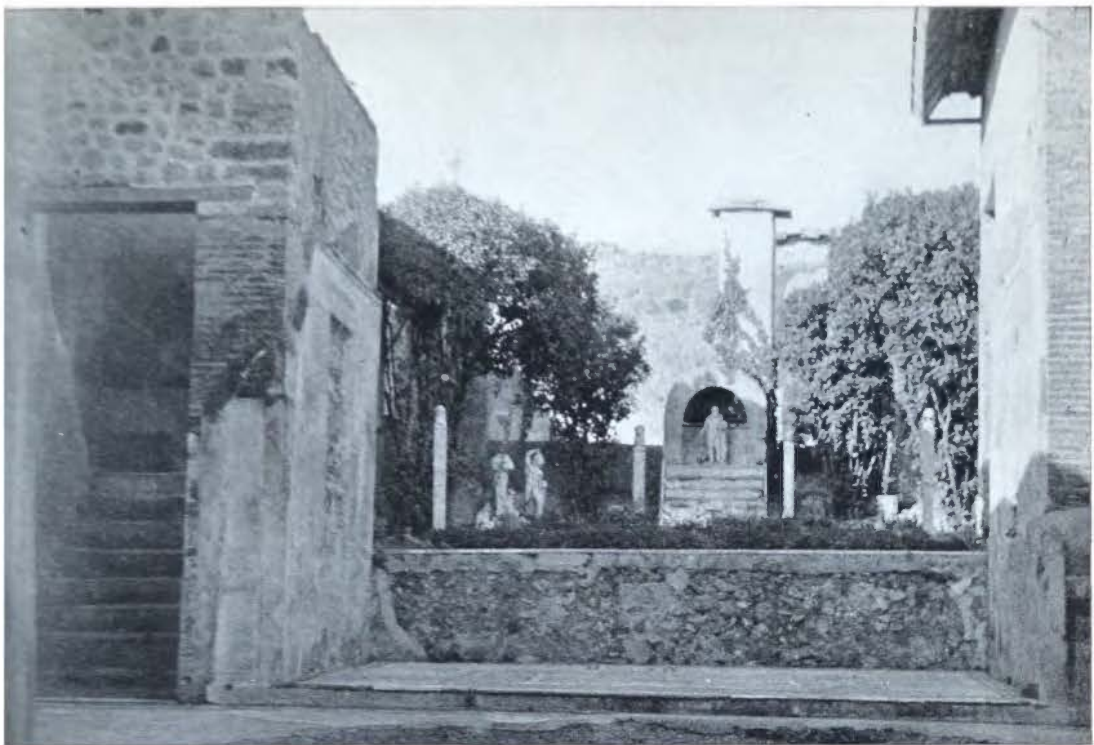




138. Village homes of mud and stone in southern Palestine, showing outdoor bake oven, piled-up beds, chickens, gossiping men of the neighborhood, and toiling women.

139. A Syrian stone house with an outside staircase to its flat roof. Rolled-up mats at right will be used at night for roof-top beds. The four-stoned mastaba in front of mats marks eternal resting place of members of family. Sheep, walking up steps to their master's living quarters, offer a vivid commentary on II Sam. 12:1-6.





140. High-class villa of first-century Pompeii, the House of Marcus Lucretius. The raised platform of the diminutive garden furnishes a charming background to the house, with statues in the niche and on flower beds, depicting Pan, Cupid, and Satyrs. Door at left leads to the wing containing probably kitchen, bakery, and latrine.

141. Stove and oven of Roman brick and stone, in the kitchen of the Villa of the Mysteries, first-century Pompeii. Niche under modern protecting roof is for the family gods, located near the cook, to receive their portion of food.





142. Clay stove and cook-pot still used in many Palestinian villages.



143. Hand grinding-mill from Banias, near the source of the Jordan, dating from early Christian times. The lower stone, of heavy basalt, almost 2 ft. diameter, is thicker than the upper stone, of porous limestone, whose surface does not easily become polished by friction. The lower stone is slightly convex and is held to the upper one by a metal peg insert in the opening where the grinders pour handfuls of grain. The wooden mill handle is held by one or two women, slaves in Bible times, who sit on the spread cloth onto which the ground meal issues from between the stones (Ex. 11:5; Matt. 24:41).



144. Cypriot statue of the bearded goddess Aphrodite, who wears an Assyrian helmet and an embroidered robe and carries a dove and a cup. Probably before 500 B.C. (Metropolitan Museum of Art)

every garment, and all that is made of skin, and all work of goats' hair . . . ye shall purify yourselves" (Num. 31:20).

PITCHING THE TENT

Pitching of tents is in the same manner used by campers everywhere. The top is spread smoothly on the ground, ropes are straightened out, and pegs are driven with a hammer into ground rocky or firm enough to give support; then the workers get inside the cloth and lift up the whole. To the women falls the pitching, as well as the making, the patching and the loading, of nomads' tents.

Poles are usually nine in number, arranged in three rows. The middle row may be 7 ft. high, while the other two rows are only 6 ft. Thus, the roof of the tent slopes from the center ridge of cloth, toward back and front. Wooden rings sewed inside the top of the tent are fastened to the ropes which run to the tent pins. In early Old Testament times the tent pins were not metal, nor was the hammer. Both were of wood. See the story of Jael, Heber's wife, who with tent pins killed Sisera, captain of the Canaanite king who oppressed Israel in the time of Deborah (Judg. 4). Isaiah's exhortation for the Hebrews to "lengthen . . . cords" and "strengthen stakes" and "enlarge the place of the tent" and stretch forth the curtains takes on vivid meaning when we watch barefooted bedouin women today pitching tents in Transjordan or along the Plains of Gennesaret.

INSIDE THE TENT-HOME

Tents in daytime are generally left open to the breeze, with cloth flaps rolled up. Sometimes they have "walls," or screens, of woven reed or wattle, about 4 ft. high. The "rooms" are two: one for the men, used also as reception room for guests, with sandals and canes "parked" at the entrance; and an inner room for the women. The latter, to which only the male head of the family has access, is also storage place for the cooking pots and simple gadgets of the nomad group. The door, or opening, faces the direction from which strangers might be expected to approach.

For protection, tents are usually pitched in groups. Only in case of affluence does the wife have a separate tent. It was from the seclusion of her own tent at Mamre or the compartment of Abraham's which was her kitchen that Sarah eavesdropped on the conversation of the angelic visitors and laughed when they told her husband that she, "stricken in age," would bear a son. "And Sarah heard in the tent door, which was behind him" (Gen. 18:10). In the betrothal story of Isaac and Rebekah, when the young damsel arrived by camel from Mesopotamia, "Isaac brought her into his mother Sarah's tent" (Gen. 24:67). A reference to separate tents for maidservants is made in Gen. 31:33.

Glueck tells how, in Transjordan, little goats and calves enter at one end of the tent, and the family at the other. Old cows come in the middle of the night to sit by smouldering embers of camp fires.

Floor-covering is earth itself, or hand-woven matting, or in the quarters of rich sheiks, hand-woven carpets. One Kurd chieftain, whose tent is described in *The Letters of T. E. Lawrence*, had a huge open marquee with forty-nine poles. Next to the curtain of the harem sat the old sheik on a dais, adjacent to forty dishes of desert food, rich with curry.

EQUIPMENT

Stoves for baking daily bread are a few stones set up at the tent door, or holes in the ground, heated with charcoal until their walls are hot enough to bake the thin, flat loaves placed there. Equipment for tent housekeeping is crudely simple. Changes of garments are scant; hence clothes chests are not necessary. A few earthen pots and bowls; a stone grain mill, or mortar and pestle; water jars (now succeeded by tin oil cans); a lamp of pleated cloth treated with paraffin and fastened to a brass lid and bottom; bed mats, which are piled in a corner of the tent by day and unrolled on the ground at night—these are the essentials. A woolen cradle may swing from two of the inner tent poles. Chickens, dogs, and children wander in and out among the women sitting on the floor at their tasks. Grandfathers, unable to work, dandle infants on their

shoulders. Hideous scavenger dogs ward off approaching strangers.

TENTS IN SCRIPTURE

Tents are expensive luxuries. Only the rich among Sinai bedouins can afford any tent at all. Yet these folks are of pure Arab tent-dwelling stock, descended from the large Arab tribes of the Hejaz.

The finest picture of tent life in patriarchal times is found in Gen. 18. Abraham, traditional founder of the Hebrew nation, had been born in a city of comfortable, well-built, two-storied houses—Ur of the Chaldees, on the Euphrates River. The thrilling remains of this Sumerian city have been excavated by Sir Leonard Woolley. This great archaeologist sees Abraham as a historic figure, living in no mean city, indeed, in a very sophisticated city, before he voluntarily became a wanderer for God, a sojourner by faith “in the land of promise, as in a land not his own, dwelling in tents . . . for he looked for the city which hath the foundations, whose builder and maker is God” (Heb. 11:9). When Abraham set out on his religious quest, like the Pilgrim Fathers who left their comfortable seventeenth century English homes for the American wilderness, he pitched his tents and built his altars to Jehovah time and again, as he became a very rich herdsman of sheep and cattle. He usually looked for a clump of oaks for his site, as at Mamre near Hebron in southern Palestine.

These oak-shaded sites are sought after today. Often they conceal vestiges of ancient cities and of former nomads. If, in addition to trees, wells were adjacent, greatly contested was the privilege of pitching camp. “The herdsmen of Gerar strove with Isaac’s herdsmen, saying, The water is ours” (Gen. 26:20). For a good camping ground was something vastly different from wilderness wastes. Isaiah, wishing to picture the complete desolation to which Babylon would be reduced, declared that it would be so utterly demolished that not even the Arabian would pitch tent there; “neither would shepherds make their flocks to lie down there” (Isa. 13:20).

The details of tent life depicted in Gen.

18 include the favorite seat of the father at the tent door, his hospitality to strangers, and the tasks of the women.

Most of the activities of tent families go on outside the tent, except at high noon, when sleep is popular, or at night.

Long after the Hebrews had founded cities and ceased to dwell in tents, they continued to use tent imagery in their religion and their conversation. As late as Hezekiah’s time, this reformer of worship from the ways of idolatry ordered the priests and the Levites to give thanks and praise in “the gates of the tents of the Lord” (II Chron. 31:2).

THE TENT OF MEETING

Hezekiah remembered the story of his people’s wanderings when the only shrine of the true Jehovah was a “tent of meeting.” This cloth chapel, or Tabernacle, covering the ark of the covenant containing the tables of the law, was carried from camp to camp in the wilderness among the tents of the Hebrew people. Even when the shrine was set up on a designated framework of wood, the tent idea lived on in a series of coverings (Ex. 25, 26) thrown over the frame. The inner layer was of rich oriental tapestry embroidered with mystical cherubim for the “throne room of Jehovah”; and the outer layer, of the customary tent cloth used by easterners, was made of eleven strips of goat’s-hair cloth, each 30 cubits long and four wide. Over the tent proper two more layers were thrown: one of rams’ skins dyed red probably with vegetable dye, not the Tyrian murex purple; and a layer of skins from animals now extinct. Thus the tent life of God, so to speak, was identified with the tent life of the nomadic Hebrew people.

After King David had built his palace of cedar wood and stone fabricated by carpenters and masons of his friendly ally, King Hiram of Tyre, he felt ashamed, as he confessed to Nathan the prophet (I Chron. 17:1-5): “Lo, I dwell in a house of cedar, but the ark of the covenant of Jehovah dwelleth under curtains.” He realized that God’s symbol had “gone from tent to tent” ever since Israel had come up from Sinai under Moses.

Even when the Children of Israel had settled down in the cities of Judah, they liked to refer to going home with the phrase, "to your tents" (I Kings 12:16).

HOUSES IN SETTLED SITES

As soon as cave men pursuing their hunting in the plains of Palestine accidentally discovered that wild grain was edible, they began to think of sowing fields and cultivating seed for food. In order to keep watchful eye on the precious "sown" they emerged from their damp caves and erected shelter near their fields. Thus developed some of the earliest shacks and shelters. Tents, as well as more stable types of home, were used by early farmers and herders of flocks. As Robert Engberg, one-time Director of the American Schools of Oriental Research in Jerusalem, comments, cave men soon learned that they could get as much shelter from grouping their mud or stone homes in proximity as they had secured from their rocky caverns.

MUD HOUSES

Whether of sun-dried brick or of even cruder forms of structure, mud houses have always been the homes of poor families of the plains (illus. 138). By their very nature these structures have long since "dissolved" and disappeared from view. But their successors continue to be reared in the Nile Delta along the life-bringing canals of the lush cotton fields, and in drab Arab villages of Palestine centering about wells. Some of these houses are mere rubble, containing fragments of former dwellings down the centuries. Lands so frequently overrun by invaders offered no encouragement to build elaborate houses.

When made of *mud brick*, homes were of two types of material, *sun-dried* and *fire-baked brick*. Archaeologists tell us that some of the first mud bricks, uniform in size, sun-baked, and with parallel sides, were superior to many made in the East today. Mud brick was called *libn* and was made of clay with a molasses-like consistency. The same clay served as mortar and was often smeared over the walls for

an extra coating. When shaped the bricks were set row by row in the hot Mediterranean sun and allowed to dry a few days before the bricklayers set them in place. Walls of such sun-dried brick have been known to last for centuries, despite the erosion of courtyard and other outside walls by the beating of heavy rains. Often they show the delving excavator in Iraq or Palestine, burned areas, which indicate that a siege was withstood.

Palestinian bricks were larger than ones seen today in amphitheaters. Sometimes, as at Gezer, bricks were 21 by 10 by 4 in., or 16 by 16 by 5 in., usually sun-dried. By their size, bricks reveal affinity with Babylonian or Egyptian material. Often mud brick made up the inside layer of Ninevite palaces or Babylonian temples. Babylon covered this crude work with burned or glazed bricks; Nineveh, with stone, often beautifully carved.

Binding the brick by mixing straw with the clay is interesting because of its significance in the Bible story of the Children of Israel in Egypt (Ex. 5:1-21). The foreigners were compelled by Pharaoh not only to produce the customary output of bricks they had been turning out for his public-works projects but also, after a time, to go out and search for the necessary straw to mix with the clay. This was no easy task in Egypt, where straw was scarce and had to be taken from animals' fodder: "the number of the bricks which they did make heretofore, ye shall lay upon them; ye shall not diminish aught thereof. . . . Thus spake Pharaoh, I will not give you straw. Go yourselves, get the straw where ye can find it. . . . So the people were scattered abroad throughout the land of Egypt to gather stubble for straw." Such was the penalty imposed upon the Hebrew worshipers who sought to maintain contact with their God and ultimate freedom from Egyptian bondage by going to a distant shrine for a sacred feast.

A city whose sun-baked bricks have stood the test of time as well as if they had been kiln-baked by the usual method has been explored at Ezion-geber. Elath (formerly Ezion-geber), called "*City of Bricks with Straw*," was excavated on the north shore of the Red Sea in 1940 by the Smithsonian Institution and the American

Schools of Oriental Research under Nelson Glueck. Here in the factory town-seaport, built by Solomon more than 2,500 years ago, town walls 12 ft. wide at the base and 25 ft. high, of sun-dried brick, have been uncovered (illus. 34). Also, the mud-brick homes of the many slave laborers who were drafted by the mighty Israelite Solomon to smelt and refine ores extracted from iron and copper mines in the 'Arabah have come to light. Many thousand mud bricks went into the making of Solomon's boom factory-port, which reminds us of the vast imperial port of Ostia, pantry for Rome many centuries later. Not only have the lower courses of many of the house walls of Solomon's great armament center been recovered, but one of the original brick-yards with hundreds of semifinished bricks is still in situ. The preservation of the good mud brick, unbaked, at Ezion-geber, is due not only to the quality of the native clay, but also to the mixing of it with palm fiber, bits of shell, charcoal, and other debris. (See Glueck, *The Other Side of the Jordan*.)

Sometimes the foundations of a house in the plains were of kiln-baked brick with walls of sun-dried brick. Great skill was developed by ancient bricklayers in placing intricate rows of headers and stretchers. ("Headers" are bricks laid with their ends in the face of a wall; "stretchers" have their sides laid in the face of the wall.) Homes typical of the period of Abraham in Ur of the Chaldees have been found with lower walls of burnt brick and upper portions of sun-dried brick; the change in material is skillfully hidden by application of whitewash or plaster to the two-story dwelling.

EARLIEST EXCAVATED HOUSES: JERICHO

The oldest permanent homes yet excavated in Palestine, according to William F. Albright, are at Jericho on the plain between the Wilderness of Judaea and the Jordan Valley. The dramatic story of their mud-brick walls has been told by one of the chief excavators of this important site which figured not only in the Israelitish conquest but in earlier episodes of occupation (see *The Story of Jericho*, by John

Garstang). Huddled together inside brick city walls covering an area no larger than a village in Palestine today (about four or five acres), apartment houses for several families were built close to the rampart, or between the walls and often on them, as was the case with the home of Rahab the Harlot (Josh. 2:1-24). "She let them [the spies of Joshua] down by a cord through the window: for her house was upon the side of the wall, and she dwelt upon the wall." This wall that "fell down flat" has given not only material for Negro spirituals celebrating Joshua's feat of conquest but also matter for archaeologists who believe that the famous ramparts fell "outwards." The house where Paul lived in Damascus was on the city wall (illus. 106). And when hostile Jews counseled together to kill him, "his disciples took him by night, and let him down through the wall, lowering him in a basket" (Acts 9:25).

The brick houses of Jericho, on their little mound near the stillflowing spring, were quite small. Neolithic or New Stone Age houses in Jericho may have been beehive-shaped, like a clay model found there. But the shape of the normal Hebrew-period home at Jericho was square, with an entrance hall, a store-chamber, a large bedroom or living room, and a guest room opening onto an open court. A clay divan opposite the entrance hall suggests the Egyptian or Turkish home today, where a raised dais (*lewan*), or couch, is a feature of the reception room.

The storage rooms at Jericho were of great importance and have yielded up to the spade of Garstang and others original clay jars still filled with grain, peppercorns, onions, bread, dates, wheat, barley, and other foods, apparently abandoned in a sudden summertime siege. Sometimes the food bins were inside the house, and sometimes adjacent, as we have seen in the finer villas of Pompeii occupied in the first century by pleasure-loving Romans. Storage rooms corresponded to closets in modern homes.

STONE HOUSES

Stone houses are the sort associated especially with Bible lands. These tended to be raised in the highlands, where

denuded mountains offered plenty of stones of all sizes for the family man willing to toil arduously enough to raise walls which would shelter his clan for generations. Neighbor helped neighbor to build. Stone houses of the best type of ancient masonry adorn today the little hill-top town of Bethlehem, birthplace of Jesus (illus. 95). Of such was the inn whose stable offered him its stone manger for a cradle. Such, too, the substantial cubical stone home of Jesse the Bethlehemite must have been, centuries before Jesus. Walking through the dark yet brightly shadowed streets of Bethlehem, we have not ventured a guess as to the age of its fortress-homes with vaulted courtyards, many of which were already ancient when the Crusaders set up housekeeping with ruddy-cheeked Bethlehem women. Some of the stone houses have walls 3 ft. thick and thus are excellent protection today against air raids and earthquakes.

Stone houses from c.2900 B.C. have been found at Ai.

No finer type of Hebrew stone house from the Late Bronze Age (1500-1200 B.C.) in Palestine has been found than the domestic structures excavated at Beth-el—that biblical city mentioned more frequently in Scripture than any other Palestinian town except Jerusalem. (Consult Bulletin No. 56 of American Schools of Oriental Research.) Inside city walls, whose squared blocks of stone excel everything of the kind thus far found, homes were built with rooms grouped in one or two rows about a central court. Some of their floors were of smooth flags, fine in quality. Surprisingly well-constructed drains of stone carried off surplus water. It is fascinating to walk in and out of little rooms, whose fragmentary walls still tower above the wrecks of forgotten centuries. One fortunate excavator stumbled on a clay cylinder stamped with the figure of the old Canaanite goddess Astarte, wearing an Egyptian tiara and carrying an Egyptian cross, or *ankh*, popular in the Nineteenth Egyptian Dynasty.

Many Palestine houses are still built of small, uncut field stones set in mortar. A well-built stone home, with pet sheep walking up its outer staircase, appears in illustration 139.

EXTERIOR FEATURES

The courtyard has been one common characteristic of Mediterranean homes from Spain to Syria and from Egypt to Macedonia, through forty centuries. Rooms run along one, two, three, or four sides of the court. In the latter case, the whole dwelling is secluded from the street, as in villas of first-century Pompeii and Herculaneum and in Roman homes of Palestine. The court is enclosed within the house walls, which resemble miniature fortress walls, and the only opening onto the narrow stone-paved street is a tiny vestibule and door (*ostium*).

The rooms (*cubicula*) of such Roman homes are arranged around the court (*atrium*), open to the sky in suitable climates (illus. 140), or roofed over. In residences of the well-to-do, the court had a fountain or tiled pool, around which shrubs and flowers grew to give the impression of a cool oasis. Some of the finest ceramics of the Middle East were placed in glazed tile fountains and shallow basins (*impluvia*) which caught the precious rain water. An example of this is the lovely court of the fountain in the new Palestine Archaeological Museum in Jerusalem, whose tiles are modeled after ancient patterns. More elaborate homes in first-century Italy had a second inner court, also open to the heavens. In this *peristylum* a colonnaded passageway ran around an open square filled with rose bushes and charming little statues.

Earliest doors were probably of wattle or woven cloth, long since vanished. Later doors were of wood, stone, or metal, on leather or wooden hinges. Metal hinges were used in temples, palaces, and city gates. Doors, sometimes with two leaves, swung in their heavy sockets or on pivots set in door-jambs of wood or stone. The stone sill, or threshold, by which persons entered from the street was especially sacred. Laid across the doorposts was the lintel, upon which Israelites were instructed by law to sprinkle blood with a bunch of hyssop at the Passover season. This custom was reminiscent of the first passing over of the angel of death before the Exodus from Egypt (Ex. 12:22, 23). Doors could not be opened until the wood

or iron bar was pulled back from its socket on the inside. Hence the phrases, "I stand at the door and knock" (Rev. 3:20), and "Peter continued knocking" (Acts 12:16) on the "door of the gate" at the home of Mary the "mother of John whose surname was Mark" where "many were gathered together and were praying." Keys were of wood or iron and were often large.

Good manners forbade the wearing of sandals inside the house. They were removed at the door, even the tent door, as the dusty shoes of worshipers are removed today at mosques. Perhaps this custom is not only common sense but a prolongation of the command to Moses, "Put off thy shoes from off thy feet, for the place whereon thou standest is holy ground" (Ex. 3:5). Homes have always been sacred in rites of hospitality.

The door of every worshipful Hebrew had affixed to its post a small metal or wooden box containing on parchment the words of Deut. 6:4-9: "Hear, O Israel: Jehovah our God is one Jehovah; and thou shalt love Jehovah thy God with all thy heart, and with all thy soul, and with all thy might. And these words, which I command thee this day, shall be upon thy heart; and thou shalt teach them diligently unto thy children, and shalt talk of them when thou sittest in thy house. . . . And thou shalt write them upon the door-posts of thy house, and upon thy gates." The tubelike amulet containing these words is called the "mezuzah."

The flat roof of the Palestine home was supported by beams resting upon stone or brick walls. Across the beams—sycamore in poor homes, and cedar and cypress in dwellings of the rich—smaller beams were laid. Over these were placed layers of brush, reeds, mud, grass, and clay, rolled level with a roller kept on the roof for use after heavy rains. Sometimes the roof "sprouted," like thatched cottage roofs in Devon today. Hence the words of Isaiah, "Their inhabitants . . . were dismayed . . . they were . . . as the grass on the housetops."

Every well-built roof had a strong gutter to carry rain down into cisterns below. And, when the house was anchored against a hillside, it had an opening in its parapet by which animals walked up to thresh

grain which the family had spread on the roof to dry.

The roof is the most desirable part of a Mediterranean home. It was, and still is, put to many uses in Bible lands. Women there beat out grain on mats, with brush-like flails, and there they dry figs, dates, flax, and clothes. There they bake their flat loaves of bread. There they weave at their looms. In summer, booths of branches and reed are set up on roofs and used as sleeping places. Sometimes latticed vines enable families to enjoy here their own "vine and fig tree," whose boughs lean low. Roofs were used as places for sauntering in the delightful cool of evening. Recall how David courted the wife of his neighbor Uriah (II Sam. 11): "And it came to pass at eventide, that David . . . walked upon the roof of the king's house; and from the roof he saw a woman . . . very beautiful."

Less sordid use of the roof is indicated in the story of Peter on the charmingly located rooftop of Simon the Tanner in the little port town of Joppa (Acts 10:9): "Peter went up upon the housetop to pray, about the sixth hour." Some of the conversations of Jesus with his seekers probably took place on the tree-shadowed rooftops of Jerusalem where he could talk intimately, without interruption from ever curious crowds of the East. "Now there was a man of the Pharisees, named Nicodemus, a ruler of the Jews; the same came unto him by night, and said unto him, Rabbi, thou art a teacher come from God" (John 3:2). Possibly the two earnest talkers sat in the shadow of a tree bending over the flat roof, and the situation suggested to the Master the likening of the mysterious Spirit to the wind, which blows and no man knows "whence it cometh, and whither it goeth."

On the roof is located the most honored part of a home, its *guest chamber* with the choicest and the most private location. Such a one was "the large upper room, furnished and ready" (Mark 14:15), commandeered by Jesus for his last Passover with his disciples in Jerusalem. The chamber is believed to have been near the present Zion Gate, a site identified by many as the "Cenacle," now a Moslem prayer place (illus. 167). Peter and his Jerusalem

friends were also in a large upper room when the Spirit came at Pentecost (Acts 2:2). Paul was accustomed to using upper chambers with many lights for worship services in cities of Asia Minor, such as Troas (Troy), where he "broke bread" with new Christians (Acts 20:6-8). Some guest rooms accommodated as many as fifty or a hundred. Luke's allusion to "what ye have spoken in the ear in the inner chambers shall be proclaimed upon the housetops" (Luke 12:3) indicates the eastern custom of criers who mounted high roofs to get a message across to the noisy throngs of small towns.

In a roof-top guest chamber Dorcas was placed after her death and there received ceremonial ablutions by women whom her charity had befriended: "and when they had washed her, they laid her in an upper chamber. . . . And when he [Peter] was come, they brought him into the upper chamber . . . and he kneeled down, and prayed" (Acts 9:37-40). One of the best equipped guest rooms mentioned in the Bible belonged to a "great woman of Shunem" and her husband, visited frequently by Elisha the prophet. In fact, the hospitable friends seem to have equipped the room especially for the itinerant man of God: "Let us make, I pray thee," said the Shunemite to her husband, "a little chamber on the wall [or with walls] and let us set there for him a bed, and a table, and a seat, and a candlestick" (II Kings 4:10).

In Palestine, families themselves use their roofs and upper rooms for comfortable summer quarters.

Even before Israel had her first king, Samuel the prophet had a guest room—probably at Ramah, where he "judged Israel." For "Samuel took Saul and his servant, and brought them into his guest-chamber, and made them sit in the chiefest place among them that were bidden, who were about thirty persons" (I Sam. 9:22). Then the prophet "communed with Saul upon the housetop." Evidently the men slept in that pleasant place after the evening feast; for "at the spring of day . . . Samuel called to Saul on the housetop, saying, Up, that I may send thee away." And soon after dayspring, Samuel took "the

vial of oil" and anointed Saul to be the first king of Israel.

The roofs of village homes and of poorly built town dwellings are so flimsy that they can easily be "broken up." The friends of a sick man at Capernaum dug down through the mud and twig covering—or ripped off some of the tiles, if the roof was over a court—and ingeniously circumvented the throng at the door and let the palsied man down before Jesus (Mark 2:4).

When wood became scarce in Palestine because of frequent spoliation of forests in war, beams became scarce and costly. Domes were then devised as roofs. But corners were filled in with arches, to provide flat space where people might walk. Heavy stone arches support roofs and give graceful effect to simple, massive homes.

The parapet was required by religious law of the Hebrews. A low protective wall kept people from falling into the street below: "When thou buildest a new house, thou shalt make a battlement for thy roof, that thou bring not blood upon thy house, if any man fall from thence" (Deut. 22:8).

Two-story homes have outer stairways of broad steps leading to upper rooms. Usually the staircases lead up from a walled court, to prevent marauders from entering. Under the steps, doves nest in quiet nooks. Occasionally, as in illustration 139, the stone steps lead up from the street without any court. Animals and family all use the same steps.

Terraces of solid, cubical stone dwellings are picturesque when spread out on hills of Palestine. Roofs of one level form steps by which people reach their homes on the next level, so that one can leap up nimbly from his neighbor's to his own house. One of the best examples of terraced homes is in Safed, 2,749 ft. above sea level. This holy little city of Jewish traditions and Talmudic associations is such a place as Jesus had in mind when he spoke of "a city set on a hill" whose light cannot be hid (Matt. 5:14).

Characteristic eastern desire for privacy within the home tended to place the windows very high above the street. Those on the present Via Dolorosa in Jerusalem look

down on passers-by as if from a high tower. Sometimes windows were only slits. Curtains kept out the damp, for glass did not come into general use until Roman times, and not then in the typical home, although glass had long been manufactured by Phoenicians at Byblos and Sidon. As in the Temple, so, in the better type of home, windows were of "fixed lattice work" (I Kings 6:4). Even today in the Middle East, windows are grilled with wooden screens or iron bars. Often they are over main doors, where occupants can observe what is going on without being seen themselves.

In Bethlehem we have noted windows in solid stone masonry, bearing above them a painted white cross, square if the owner is a Greek Christian, and Latin if he worships with the Franciscans at the Basilica of the Nativity.

The elevation of windows is suggested several places in the Bible. The Hebrew youth, Daniel, when captive in Babylon, lived in a house whose rooms apparently had several windows; for we read, "His windows were open in his chamber toward Jerusalem; and he kneeled upon his knees three times a day, and prayed" (Dan. 6:10).

INTERIOR OF HOMES

Scholars agree that the Hebrew settlers in Palestine after the conquest contributed nothing original to domestic architecture. We get the indefinite impression of their moving in upon the Canaanite occupants and using dwellings already erected in sections "assigned" to various tribes.

Floors were usually of clay, stamped hard with use. Occasionally they were of flags, as we have seen in stone houses at Beth-el. At Jericho and Ta'anach near Megiddo, some ancient homes had neatly plastered floors, that is, plastered with thin layers of mud. Sometimes chips of native limestone were worked into the mud-plaster flooring. This was a first step toward the Graeco-Roman elegance of mosaic floors, with tiny square tesserae of varicolored marble or fragments of semiprecious stones. We have seen examples in palatial villas at Herculaneum, such as the House of the Deer, whose lapis-lazuli

and marble mosaic floor was covered with volcanic mud from Vesuvius in A.D. 79 and revealed by skillful archaeologists in our era.

One of the most valuable studies of the shape and arrangement of houses in Bible lands through the centuries has been made by Millar Burrows (*What Mean These Stones?*). He describes only ground plans, for so little of the walls remain of dwellings in the New Stone and Copper ages. He indicates three types: the long-room type, of Assyrian origin, facing a rectangular court with a door at the short end of the court; the broad house, with the court door opposite the long side of the rectangle; and the "around the corner" house, with the opening at the upper right corner of the rectangle, on its long edge. The latter originated in Palestine, Syria, and Egypt. These were houses used in the Chalcolithic Age, examples of which have been found in Lachish near the border of Egypt, at Beth-shan, and at Megiddo on the Plain of Esdraelon.

Early Bronze Age homes (c.3000-2100 B.C.) had a broad room facing a central court. Some Early Bronze houses show four stone or brick bases in their first floor, indicating possible pillars supporting a second story. Structures were of mud brick and stood along primitive streets. Many Bronze Age houses were of wood. Some were of mud bricks set on stone foundations.

Middle Bronze Age homes offer rich revelations not only at Jericho but also at Ur of the Chaldees, original home of Abraham before he gave up his comfortable city environment to become a wandering father-founder of the Hebrew people in Palestine. A Sumerian house of Abraham's time in what became southern Babylonia has been vividly described, and indicated by an imaginative drawing, in Leonard Woolley's *Ur of the Chaldees*. Ur, the city of Abraham, was a well-set-up civic center about 4,500 years ago. Its homes contained all the fundamental features of domestic architecture used today. The Sumerians of Abraham's Chaldea gave us not only an alphabet but notable domestic and public architecture. Residences in Ur had lower stories of burned brick, as we have indicated above, with an upper story of

mud brick, whose joining was hidden by plaster. A brick staircase led from an open inner court to the second story, whose rooms seem to have opened from a surrounding balcony looking down on the court. First-floor rooms with high ceilings included a reception hall with a tiny drain in the floor for visitors' foot ablutions, a lavatory under the stairs, a servant's room, and even a domestic chapel. The open courtyard was paved and had a drain to carry off rain water; bricks evidently supported columns holding up the balcony. The private rooms of the family were probably on the second floor. The whole house gives the impression of a lovely Italian farm villa. Civilization is said to have begun in the Tigris-Euphrates Valley as soon as the Flood of the Genesis narrative had begun to dry, and, at Ur, pottery in the sub-Flood level has been found. The Book of Genesis, in light of current archaeology, is daily becoming more trustworthy in the general trend of narratives.

Late Bronze homes Burrows describes as often having two rows of small rooms along the court. These indicate influence from the north and northwest, not from Babylonia. Stone was coming into use. Bethel shows us dramatic house remains of this period. And in the Late Bronze Age and Early Iron Age of King Solomon (c.973-933 B.C.) we find inferior masonry. Israelites who had been living in tents knew nothing of building trades. Even King David lived in a "house of cedar" built by Phoenician artists from Tyre, although the phrase "house of cedar" may mean "trimmed with cedar," even as the "houses of ivory" attributed to Samaria were palaces trimmed with ivory panels. Solomon brought improvement into domestic architecture by his importations, also, of famous stonemasons and wood-workers trained by King Hiram, his friend and ally.

Early Hebrew dwellings were flimsy in construction and similar in shape to their Canaanite predecessors. Rooms faced a central court again, and poorer families had but one chamber facing a walled-in court. This type persists today. Yet occasionally Hebrews after the Exile built dwellings with as many as twelve rooms, like the one discovered at Gezer made of

unhewn field stones set in mortar. It probably had two stories. Its room walls were plastered and painted in red and green stripes. Ochre or red was often applied to plastered walls. Houses in the Middle Iron period, says Burrows, were the usual flat-roofed type in the highlands, with exterior staircases. The period at which the Exile and domination by the Persians occurred, has left us very few and poor domestic remains.

We have only one reference in the Bible to the home of Mary: she "returned unto her house," from the house of Zacharias and Elizabeth (Luke 1:56). It was not a tent, or a cave, but a house.

By the time of Jesus, people in the Greek cities lived in typical Hellenistic and Roman dwellings. At Jerash in Transjordan, founded by veterans of eastern wars from Alexander's time on, palaces of stone faced colonnaded thoroughfares like the Street of One Thousand Columns, leading from the market to the principal temples, some of which became Christian churches. Roman homes in Palestine were like those in Italy itself, ornate villas with rooms leading into courts open to the sky (illus. 140). The houses of Pharisees with whom Jesus sat at meat were palatial for their day, with porches open to the street, so that passers-by could look in and see the diners. Paul's home in Rome, "his own hired dwelling," may have been a tall apartment house, under whose eaves laborers lived. Apartments of this sort excavated at Ostia have given us a better notion of first-century Rome than structures found in Rome itself.

FURNISHINGS OF TYPICAL PEASANT HOMES

When bedouins or grazing people took up more settled homes in villages or little towns, they carried over the general plan of their tent space into the rooms of their simple home. Just as the tent had two sections—the public outer one, where men met and the work of the family was conducted, and an inner secluded space where the women lived and did much of their housekeeping, crude though it was—so the average cubical house in Palestine for centuries has had one large space divided into

two apartments. In the space nearest the door live the domestic animals, the ox and cattle and donkey which we associate with the first Christmas in Bethlehem.

IN THE ANIMALS' QUARTERS

Mangers for animals were placed in the lower level, or *rowyeh*, of the village home. These were of stone, sometimes carved out of the native rock wall of a cave which was incorporated into the dwelling, as in the inn at Bethlehem. The rows of rocky mangers, such as we have seen excavated at Megiddo by the Oriental Institute of the University of Chicago, in Solomon's stables (illus. 21), are low against the ground. They are never set upon wooden legs, as many an art masterpiece of Nativity scenes indicates. Tissot in his cave scene from the Bethlehem grotto depicts a manger cut like a wide pocket in the scarp of the cavern-stable of the inn.

ON THE MASTABY

Behind and above that lower room there is a raised platform, or *mastaby*, supported by arches beneath which the smaller animals—sheep and goats—find quarters. On that platform women grind meal and cook, the family sleeps, and all the activities of everyday living proceed, except those which are carried on in the open, like farming, selling, and participating in handicrafts of the bazaars.

Whether in tents of *bedouins*, or poor homes of village *fellahin*, or more prosperous stone houses of city-dwelling *mandany*, certain pieces of equipment persist through the centuries.

Baking equipment consists of a *grinding mill* of black basalt or stone. In ancient times, the mill was a *saddle-shaped stone* with a concave top, on which sun-dried grain was placed and rubbed fine with a stone which fitted into the palm of the hand. This method of grinding was used by American Indians and other primitive peoples. In later times, and today, the grain mill consists of two pancake-shaped round stones, one set upon the other and held together by a wooden pivot, with enough space left for grain to be poured into the opening. Turned by a wooden

handle set into the upper stone, the mill revolved slowly, and the grain flowed out a little trough (illus. 143). It took one woman to pour the grain into the mill and another to turn it. Hence Christ's phrase, "two women shall be grinding at the mill" (Matt. 24:41). Household necessities are a large wooden *kneading bowl* and a convex metal sheet, on which the flat, round loaves are placed to bake after the sheet has been heated by placing charcoal, twigs, or dung cakes under it. Sometimes the loaves are baked in the house, sometimes on the roof, and sometimes in the courtyard. Arabs like to heat a hole in the ground, remove the charred wood, and bake the loaves by leaving them all night, plastered along the sides of the heated hole. Again, a group of villagers may have a beehive-shaped oven shared among them, into which eggplants, squash, and meat, as well as loaves of bread, are shoved for baking. One neighbor shapes the flat loaves while another supervises the baking. We have seen this method followed in North African Tripoli's Arab quarter, in Beit Jibrin village in southern Palestine, and in Sidon and Samaria. Many families have the public miller grind their grain, and the public baker cook their loaves.

Bedrolls, sleeping mats, wool-filled mattresses, goat's-hair quilts and hand-woven coverlets are rolled up in one corner of the platform during the day to make more room. Bedding is put in the dowry chest if the family owns one. Sometimes the chests are beautifully carved with cedars of Lebanon. In summertime, when families move out into leafy booths near their vegetable patches, the bedrolls are piled up in a sunny corner of the "porch" (illus. 138). At night they are unrolled on the floor or, as we have seen along the Sea of Galilee in summer, on the starlit roofs. Some houses have clay couches running along one side of the room, a custom lasting from ancient times.

The Book of Deuteronomy records as something extraordinary, in the sight of the Israelites wandering under Moses, that Og, King of Bashan, was a giant who had a bedstead of iron, 9 cubits long and 4 wide (Deut. 3:11). The famous bronze bedstead found at Bethpelet dating from the Persian period is thought to have been

brought from Crete. If Canaanites and early Hebrews had bedsteads, they were probably of wood and have vanished. Some late Hebrew couches have come to light at Tell en-Nasbeh (Mizpah) near Jerusalem.

When writers of our Bible wished to contrast the simplicity of the average Palestinian family with the extravagance of those who lived in palaces, they played up, for example, the apartments of King Ahasuerus at Persian Shushan, whose "couches were gold and silver, upon a pavement of red, white, and yellow and black marble" (Esther 1:6). Archaeology has brought this description within the realm of probability. Yet we must interpret "couches of gold and silver" as meaning couches trimmed with gold and silver. First-century Romans had metal beds, as excavations at Pompeii and Herculaneum have revealed.

Life in the open, from dawn till dusk, makes people of the Middle East weary enough to use even stones for pillows. Jacob "took one of the stones of . . . [Beth-el] and put it under his head" (Gen. 28:11). We have tried stony pillows at the heat of day under olive trees and have found them adequate. The disciples whom Jesus found asleep in Gethsemane had stones for pillows when they should have been using them for altars of prayer.

Members of Palestine families sleep side by side on mats, fully dressed. We have had a proud Arab invite us into his house late at night and rouse his wife and children from the floor where they were sound asleep, to make us coffee. Hence the Bible allusion in Christ's parable to the man who would not heed the importunate knocking at his door by a neighbor asking bread for an unexpected guest: "Trouble me not: the door is now shut, and my children are with me in bed" (Luke 11:7).

The baby's bed was a woolen cradle swung from roof beams, as it had been from tent poles in nomad families. Cradles were slung on mother's back when she walked into the fields to reap. Wealthy families had wooden cradles inlaid with mother-of-pearl.

Chairs were not found in homes of Bible lands, but square, low stools were used. And sometimes camel saddles were brought into the room and used for

seats. Their saddlebags were useful for storing clothing, or for hiding anything from money to gods, like the teraphim Rachel secreted there (Gen. 31:34).

Fuel for heat in the home consisted of charcoal placed in an earthenware pan on one side of a room. Coals covered with a board and a piece of heavy fabric retained their heat for considerable time. In more pretentious homes a metal brazier contained the coals. Such a brazier was lighted in the court of the high priest at Jerusalem, and by it Peter stood "warming himself in the light of the fire" (Mark 14:54) while his Master was being tried. A very fine type of enameled brazier has been excavated from a Roman provincial home at Pompeii—a fine art-piece of the period. If the fires for cooking were built inside the room, smoke escaped by a hole in the roof with a broken water pot for chimney, or through chinks in the walls. Crackling brambles and cakes of dried dung, as well as charcoal, were used for domestic fuel. The coal of fires which Jesus built for his friends along the Sea of Galilee the morning he had that mystical breakfast for the fishermen (John 21:9), with fish laid on the coals, and bread, reminded them of the well-loved routine of their own Galilean homes.

Convenient stoves are made of clay. They are rounded at the back, with a small hole for draft, and open at the front to receive twigs for fuel. The huge clay or brass cooking pot is placed on a groove at the top (illus. 142). We have seen a Martha-like woman of Bethany walking to her neighbor's, carrying on her head such a clay stove with its pot in place.

Short-handled corn brooms were part of household equipment. The woman in Christ's parable who lost one of her wedding-dowry coins lighted a lamp and swept the house, looking "diligently until she found it" (Luke 15:8).

Lights were usually homemade clay lamps, small enough to fit the palm of the hand. Often they were set in little niches in the wall of the room. Earliest lamps were saucer-shaped. Later designers turned up the edges more and more until the lamp was closed, leaving only a center hole to receive the oil and a tiny spout where the wick burned. A study of clay lamps in

Bible lands has been made by many a scholar, who assigns date and place of origin by the color of the clay and the mode of decoration. See illustration 56.

Candlesticks of clay or metal were also used, sometimes with several branches. They were set on the floor or on a stand (Matt. 5:15) and "shineth unto all that are in the house." Easterners like to keep a light burning all night. A fine specimen of a four-branched candlestick has been unearthed at Nob (illus. 55). More prosperous homes sometimes had a tall candlestick on a polygonal base. Arab tent dwellers and farmers have for many centuries used lanterns of oiled and plaited parchment, attached to a pierced brass saucer-like bottom and lid. Such a collapsible lantern was useful when tucked in camels' saddlebags.

Many villages in modern Palestine light their homes with electricity. Power poles and wires carry the "juice" across the Plain of Esdraelon; see illustration 133.

Round, woven mats of straw and grass, colorful and clean, are often used as tablecloths, placed on the floor. On the mats are set the large center clay bowl of food, with smaller "sop dishes" for individuals (illus. 182). Hence Christ's allusion, "He it is, for whom I shall dip the sop, and give it him" (John 13:26). Guests receive from the hosts choice morsels of food dipped up with bare fingers and placed in their mouths. Homes of the rich have low wooden tables, sometimes inlaid with mother-of-pearl in geometric designs. Huge metal trays are placed on the low tables. Short-legged stools or chairs are drawn about the table. Romans used a *triclinium*, or room having a couch running around three sides of a table, or a *biclinium*, in which two persons could recline. Guests reclined while eating. The host sat at the highest point. Can we derive from this custom an interpretation for Luke 14:10, "when thou art bidden [to a feast] go and sit down in the lowest place; that when he that hath bidden thee cometh, he may say unto thee, Friend, go up higher"? The couch seating arrangement helps interpret the details of Christ's Last Supper, with John nearest him in a place of honor where he could hear even whispered words of the divine host.

Tools for the men of the house were tucked into convenient corners of the lower level or the platform. If they were farmers, plows, mattocks, and hoes were there, varying in form through succeeding centuries. The flint knives and axes of Neolithic men continued long after New Stone Age times. Iron sickles, which replaced flint ones, and numerous other types of iron farm implements, such as harrows and axes, have been dug from levels of 1000 B.C. David knew plenty of iron hardware, from nails to hinges. Hand sickles still used in cutting wisps of grain in high Lebanon wheat fields or in low fields near Tekoa in Judaea are similar in shape to those used in David's time (illus. 5).

If the farmer sells his grain at the market, his house will probably contain a *measuring unit*, a half-homer or an omer. Hence Christ's suggestion to families not to hide their light "under the bushel" (Luke 11:33) but to place it "on the stand, that they which enter in may see the light." If the men of the house are carpenters, their saws, chisels, planes and other tools are safeguarded in dark corners, away from thieves who might "break through and steal" these treasures of the poor man. Tucked safely away, too, are women's tools—their spindles, distaffs, looms, and needles, for as early as the period described in Proverbs, Palestine women were deft with their sewing:

All her household are clothed with scarlet.
She maketh for herself carpets of tapestry;
.....
She maketh linen garments and selleth
them,
And delivereth girdles unto the merchant.

Those girdles were not unlike the ones worn today in Bethlehem, city of strong and worthy matrons.

Utensils for cooking have already been touched upon in connection with bread-making. Meat hooks or forks, ladles, a goat-skin butter churn operated by shaking it back and forth, other skins for cooling water, and a bronze or iron caldron are usually present.

Water jars and wine jars of all sizes are conspicuous in the household equipment. Large ones with two handles were used for

storage of water; smaller ones, holding as much as 5 gal., were carried to the village well on girls' and women's heads. More clay pots hold grain, dried fruit, oil and the other food treasures of the family. Of shapes and types of pottery jars we have spoken on pages 110-15.

GREEK AND ROMAN HOMES

Greek houses at Corinth, and at Philippi, where Lydia entertained Paul and his companions, were typical of those built all around the Mediterranean in Paul's day. Shepherds and peasants had huts of stone in this mountainous land as in Greece and Sicily now. Better dwellings resembled the villas at Pompeii (illus. 140) and Herculaneum, with court, peristyle, and impluvium, rather than the Ostia apartment type. Excavations by T. Leslie Shear have brought to light in the western suburbs of Corinth a villa which he describes in his report of thrilling discoveries at old Corinth. Paul knew such homes.

AN ANCIENT PERSIAN HOME

The Oriental Institute of the University of Chicago, exploring a low mound near

the palace of Persepolis, under the direction of Herzfeld, stumbled on homes built about 6,000 years ago in the Stone Age. The walls of the village still stand to a height of 5 or 6 ft. Near hearths where housekeepers cooked were found pottery vessels still containing fragments of food. The earliest known windows extant are in these ancient homes.

AN EGYPTIAN PALACE-HOME

We may regard the Tell-el-Amarna palace residence of Akhenaton, his wife, and daughters as typical of the royal Egyptian home. It was of the central-room type, with a block of higher rooms surrounding the main one and lighted by clerestory windows—a major development in architecture. A guest room was off the central one. The master's bedroom and anointing chamber, toilet with seat of pierced limestone, and bathroom were at the right of the square mass. A chapel featured this home, with a garden behind it, in which was the cooling pool. Women's quarters, servants' rooms, stables, and a granary court along West Street are vividly pictured in J. D. S. Pendlebury's *Tell-el-Amarna* volume.

ADDITIONAL BIBLE REFERENCES

"because of Midian the children of Israel made them the dens which are in the mountains, and the caves" (Judg. 6:2)

"three of the thirty chief men went down to the rock of David, into the cave of Adullam" (I Chron. 11:15)

"Laban felt about all the tent, but found them not [the teraphim of Rebekah]" (Gen. 31:34)

"This is the law when a man dieth in his tent: every one that cometh into the tent . . . shall be unclean seven days" (Num. 19:14)

"David . . . put his armor in his tent" (I Sam. 17:54)

"tents of wickedness" (Ps. 84:10)

"plague come nigh thy tent" (Ps. 91:10)

"tent of the upright" (Prov. 14:11)

"spreadeth [the heavens] as a tent" (Isa. 40:22)

"there is none to spread my tent" (Jer. 10:20)

"thorns shall be in their tents" (Hos. 9:6)

"house upon the rock" (Matt. 7:24)

"Jesus . . . into Peter's house" (Matt. 8:14)

"passover at thy house" (Matt. 26:18)

"Sidon . . . And he entered into the house" (Mark 7:24)

ISLANDS

The isles shall wait for his law.

—Isa. 42:4

Introduction

Attitude of Ancient Hebrew People to Sea and Islands

Twelve Islands of the Bible

Cyprus

Salamis, Paphos

Samothrace

Lesbos

Chios

Samos

Cos

Rhodes

Lindos, City of Rhodes

Crete

Fair Havens, Knossos, Revelations of Minoan Civilization

Cauda (in lee of, only)

Malta

Of Paul's Time and Today

Sicily

"Touching at Syracuse"

Patmos

Islet of the Johannine Apocalypse

Additional Bible References

Bibliography

INTRODUCTION

The prominent place of Mediterranean islands in world news builds a bridge carrying us back to the rocky steppingstones by which the Bible reached ancient peoples. Early in World War II they were recognized as huge "airplane carriers."

The Hebrew people were not seafarers. Solomon even hired ships and sailors from King Hiram of Tyre for his extensive mercantile enterprises.

ATTITUDE OF THE ANCIENT HEBREW PEOPLE TO SEA AND ISLANDS

The narrow strip of Hebrew homeland fronted on the Sea of the Ancients we call the Mediterranean. Yet Israelites felt it a barrier rather than a watery highway. They regarded it as the province of Canaanites who dwelt along it (Num. 13:29). Old Testament books, with the exception of Jonah, say little about the sea. But in New Testament times the sailing ships which carried the first missionaries of the good news literally bumped into

the rocky islands which dot the sea. Evangelists soon discovered that the only fit season for boat travel was from March to October. Overland routes they used at other times.

Prophets and authors of Psalms associated "the islands which are beyond the sea" with merchandising Sidonians and Tyrian men "strong in the sea" (Ezek. 26:17). They thought of them as haunts of wild beasts, or as places where heathen dwelt carelessly. Authors of Psalms pictured lovely islands sending tribute to Jehovah and his servant, Solomon. Ezekiel immortalized Tyre as a rock-city dwelling "at the entry of the sea" (27:3). He knew that this "throne" of Phoenician gods was built on two tiny islands connected by Hiram of Tyre with a pier and attached to the mainland by a causeway, as Singapore island is attached to the Malay mainland. Sidon, oldest town on the Phoenician coast and so important that Phoenicians were called Sidonians, rose on a promontory which dipped into the sea and spurted up as a little isle linked to land by ancient engineers. This situation explains why the

same word is translated "coastland" and "island." The Phoenician city of Arvad was also an island.

Ancient Hebrews did not use the term "Mediterranean" but referred to "the great sea in front of Lebanon" (Josh. 9:1) and "the great sea" which was the west border of Judah (Josh. 15:12). Joshua spoke of territory he had allotted between the Jordan and "the great sea toward the going down of the sun" (Josh. 23:4). Probably coastal members of the tribe of Dan sometimes went to sea with Phoenicians and were chastised by Deborah: "Dan, why did he remain in ships?" (Judg. 5:17). When she fumed about Asher sitting "at the haven of the sea" and tarrying by his creeks, she cast aspersions at Hebrews who preferred to await the arrival of ships with cargoes to peddle, than to war even for Jehovah.

There was wistful yearning in the Jewish heart which recognized that men who went "down to the sea in ships," that did business in great waters, these saw the wonders of the Lord (Ps. 107:23). Pious mariners felt the raging tempest, the mighty waves, and the melodious roaring as manifestations of Yahweh in his universe. Yet they confessed that "the way of a ship in the midst of the sea" was as incomprehensible as the way of an eagle in the air or the way of a man with a maid or of a serpent on a rock (Prov. 30:19).

Although Israel did not push beyond the shores whose sands expressed the multitude of their desired descendants, yet, when Solomon built the Temple at Jerusalem, he allowed Phoenician metal-workers to construct as a conspicuous feature a molten sea of copper. It was made of booty captured by his father David from Philistines and Syrians. A tactful concession, this, to the seafaring craftsmen who shaped this font in which Hebrew priests washed ceremonially (II Chron. 4:6) as Moslem immams wash today in fountains adorning their mosque courts.

This sea of copper was broken into bits by invading Chaldeans in the sixth century B.C. and carried off to Babylon to make doors and to ornament palaces—an incident reflecting scarcity of metal in that era.

The symbolic meaning of the two rows of oxen on which the molten sea stood is easy to fathom: on the sacrifice of oxen rested the worship of ancient Hebrews and of neighboring peoples.

TWELVE ISLANDS OF THE BIBLE

About twelve islands are mentioned in the New Testament. These are stepping-stones in the missionary journeys of Paul, Barnabas, Mark, Timothy, Titus, Luke, and Silas. And one of them, craggy Patmos, supplied the internment cell for John of Ephesus, put to quarry labor, perhaps, by Rome, as millions of men and women were shamefully interned by Nazi tyranny nineteen centuries later. We shall discuss—far more briefly than they deserve—the following islands: Cyprus, Samothrace, Lesbos, Chios, Samos, Cos, Rhodes, Crete, Cauda (lee side only), Malta, Sicily, and Patmos. Their traits accentuated the character and beliefs of insular peoples.

CYPRUS

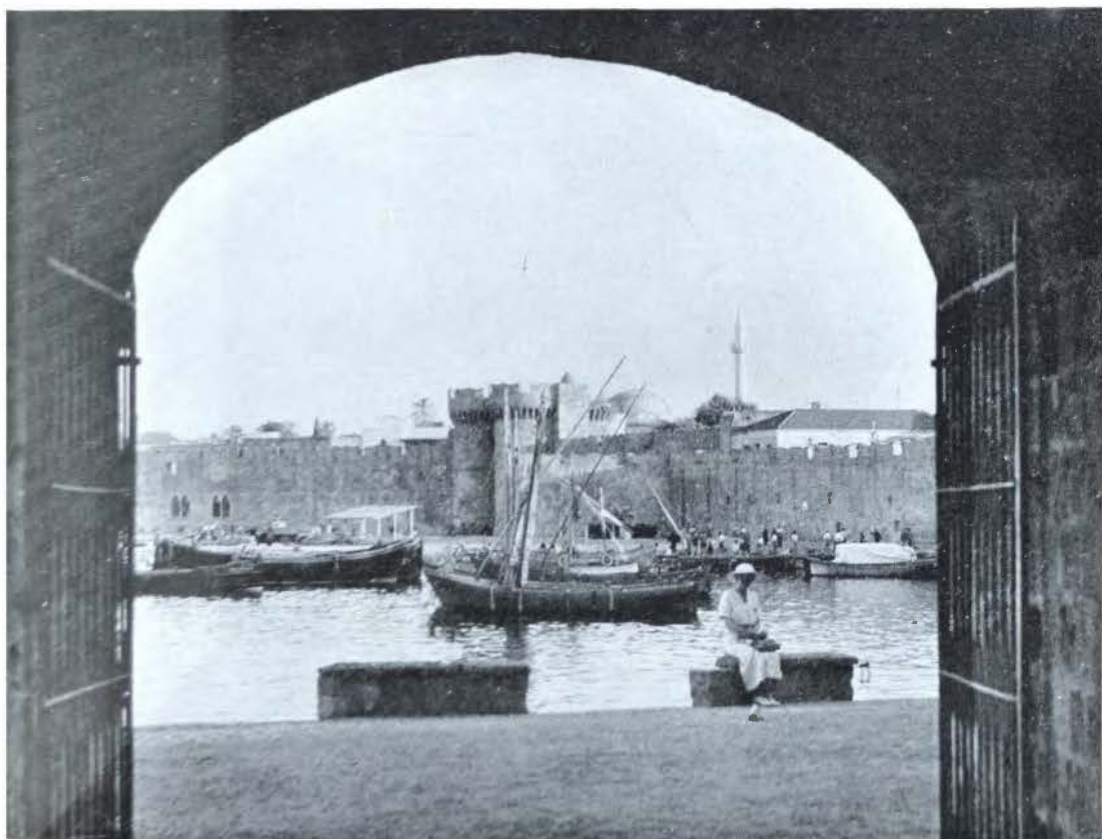
Cyprus, visited by Paul and Barnabas on the first missionary journey (Acts 13:4-12), is the third largest island of the Middle Sea, with an area of more than 3,000 square miles. It is a crown colony of Great Britain, with Greeks and Turks predominating. It is shaped like a clenched fist, with forefinger pointing toward Syria, Antioch, and the Orontes River, from which section it received its major influences. Cyprus is visible in clear weather from Asia Minor forty-six miles north, and from Syria sixty miles east. Two mountain ranges furnish picturesque backgrounds to important plains. Ranges rising 3,000 to 5,000 ft. bulwark the section from which copper in vast quantities has been extracted in ancient and modern times. Cyprus means copper. The wholesale cedar market of the island is no more, because Cypriotes preferred goats to forests. But the copper digs which gave Cyprus a major role in the Chalcolithic Age (from c.4000 B.C. on, Albright) is still a coveted prize among nations.

Albright, in Chapter II of *Archaeology*



145. Ancient Harbor of Lindos, island of Rhodes, in one of whose tiny inlets Paul is thought to have landed en route to Rome (Acts 21:1). Upper right, the ancient acropolis crowned two thousand years ago with a Temple of Athena and transformed by medieval knights into an impregnable castle.

146. Gate of St. Paul, opening onto the Commercial Harbor, one of the three harbors of the city of Rhodes at northeastern tip of island.





147. Port of the ancient Greek city of Kyrenia, Cyprus. (*Thomas Cook & Son*)

148. A Sicilian cart in Messina, decorated with scenes of the Last Supper and arrest of Jesus in Gethsemane. The spokes of its muddy wheels are trimmed with carved cherubs.



and the Religion of Israel, states that objects have been excavated in Cyprus which "throw direct light on Israelite cult objects, such as the portable lavens of Solomon's Temple. Since relations between Cyprus and the adjacent Syrian coast were always close, most of these objects and representations may safely be considered to be of Phoenician origin." Commenting on the influential Aegean civilization west of Palestine, Albright continues, "The Aegean civilization of the second millennium B.C. was quite as high in material things as the contemporary cultures of the Nile and the Euphrates, though higher culture seems to have been on a much lower plane."

The two most famous seaports of Cyprus in Bible times were Salamis in the northeast and Paphos in the southwest, both used by Paul (Acts 13:4, 13). However, the outstanding Bible personality dominating this island's landscape is Barnabas, evidently a Jew driven abroad by persecution. Perhaps his farm near Salamis, in the rich agricultural region between mountain ranges at the center of the island, is what he sold and placed at the disposal of Jerusalem Christians (Acts 4:36-37) for their early experiment in social living.

Barnabas discovered Saul of Tarsus and vouched for him when he was under suspicion at Jerusalem (Acts 9:27, 28). He also hurried north to bring him from his home city to assist with Christian work at Antioch, which yielded embarrassing numbers of converts. However, the evangelization of his native Cyprus was the pet project of Barnabas, whose name at the outset of the Acts narrative took priority over that of Paul. Barnabas rose to the same local distinction in Cyprus that John Mark attained in Alexandria. His reputed tomb and "Apocryphal Acts" indicate how entrenched he was in hearts of Cypriote Christians.

A complete Roman road system encircled Cyprus. Many of its mileposts are *in situ* or in museums today. The conversion of the proconsul Sergius Paulus (Acts 13:7) in his capital at Paphos at the western tip of the island appears to have been influenced by both Paul and Barnabas. Possibly out of deference to this important new convert Saul changed his name to "Paul." The first New Testament

use of this name appears in verse 9 of this same chapter 13.

The Christian allegiance of a Roman proconsul of Cyprus is notable, because his headquarters at Paphos were at the focal point of the Aphrodite worship of Cypriotes, who joined other Mediterranean peoples in worship of Venus, Astarte, and other earth-goddesses. The main shrine of the Cypriote Aphrodite has been depicted on ancient coins showing columns, an altar in a court, symbolic doves and, most significant of all, the conical stone prominent in all Aphrodite worship. This Temple has now been excavated by modern archaeologists. An old Greek myth claims that Venus was born on Cythera, an island off the south tip of Greece, and was wafted like a foam-borne dream to Cyprus where men and nature, Hours and Graces, paid homage to her charms.

The illustration 144 shows a statue, now in the Metropolitan Museum, New York, of a bearded priestess of Aphrodite found in Cyprus, where it had been made or to which it had been brought, probably before 500 B.C. Note the Assyrian helmet and the long-sleeved embroidered robe—such a garment as one would expect to find between Assyria and Greece, with elements of the typical apparel of these lands blended. She carries the dove, symbol of Astarte or Aphrodite, and the cup of worship. The moon-goddess Atargatis also had a temple at Old Paphos. Phoenician Baal was worshiped at Cypriote Kition.

A very interesting archaic Phoenician tomb inscription has been lately found in Cyprus. Albright believes it dates from the first half of the ninth century B.C., when Phoenician commerce was thriving and when Phoenician galleys lifted from Cyprus heavy cargoes of copper. This inscription warns robbers away, saying there are no jewels inside and that it is the sepulchre of a poor man (*Bulletin No. 83*, p. 16, American Schools of Oriental Research).

In the fourth century B.C., Cyprus contributed to the world Zeno, founder of Stoic philosophy.

Jeremiah, commenting on the insular tendency of people in Cyprus to cling to their gods, even though they were false (2:11), contrasted people of "Kittim" with lukewarm Israelites who "changed

their glory for that which doth not profit." He found his people less loyal to Jehovah than Cypriotes were to false gods of whom their rulers were priests. In 58 B.C. when the Romans deprived the king of Cyprus of his throne, Cato offered him the high priesthood of Paphos—a tie-up between church and state which makes more meaningful the conversion of the proconsul Sergius Paulus to Christianity.

We are curious about the "men of Cyprus" who were "preaching Jesus Christ" in Antioch even before Barnabas and Paul joined in the Antioch work or made their tour of Cyprus (Acts 11:20). Another hint about early Cypriote Christians appears in Acts 21:16, telling that the lodging place of Paul and his company when they went up to Jerusalem from Tyre would be with "one Mnason of Cyprus, an early disciple."

Cyprus has been constantly coveted for its mineral wealth. Egyptians seized it in 560 B.C.; Persians, in the next century; Ptolemy, at the close of the third; and Rome had annexed it in 58 B.C., before the lifetime of Paul. Hence the accuracy of Luke in giving Sergius Paulus the title, Roman proconsul. The name of this officer has been found on a marble slab, together with the name of the city Soli, adjacent to the copper mines near a cave-temple, by General Louis Palma di Cesnola, whose noted collection of pottery and Cypriote objets d'art are in the Metropolitan Museum, New York.

During World War II, Cyprus was of inestimable value to Great Britain and the Allied Nations in safeguarding the Levant states and Palestine. New Zealand troops surveyed Cyprus and built comfortable camps there.

SAMOTHRACE

A tiny island steppingstone leading from Troas in Asia Minor to Neapolis in European Macedonia is Samothrace, whence Paul proceeded by boat to Philippi (Acts 16:11) on his second missionary journey. We remember Samothrace for the discovery there of the classic Greek statue, the Winged Victory, enjoyed by millions in the Paris Louvre.

LESBOS

Lesbos, in the northeastern Aegean, is not mentioned by name in the New Testament, but Paul on his third missionary journey stopped overnight in its large eastern port of Mytilene (Acts 20:14) on his way from Troas and Assos to Miletus in southwest Asia Minor. The story of what happened at Mytilene in the Peloponnesian War (431-404 B.C.) so perfectly illustrates what happened to conquered Mediterranean peoples subjugated by Nazi Germany that it deserves mention here. In 428 B.C. Mytilene revolted against Athens. The Athenian Assembly voted to slay all the men—6,000 in number—and to sell the women and children as slaves, even as Nazi Germany attempted to do in conquered areas of Yugoslavia, Greece, and Czechoslovakia. Yet the next morning the Athenians repented of their vindictive policy and sent a second delegation instructed to stay the execution. But they finally gave the Mytileneans the equivalent of a firing squad and hurled down the city walls. There is nothing new in cruelty of Mediterranean warfare.

CHIOS

Chios, an island thirty miles long, famous for figs and gum mastic, was once allied with Athens in the Delian League. It is noted for its rock-cut sanctuary of Cybele, Greek mother-goddess also known as Rhea, mother of Jupiter, and for its school of "Homeric poets." In Paul's time Chios belonged to Rome who had made it a "free and allied state"—the irony of the phrase is familiar—because it supported Rome in her eastern wars.

SAMOS

Samos is separated from Asia Minor by a strait only a mile wide. In the seventh century B.C. it was an important Greek trade center because it lay on the way from inner Asia Minor to the west. It bore proudly on its coins a head of its famous philosopher-son, Pythagoras. It honors Paul today in possessing a predominantly Christian Greek Orthodox population, a fact as vital to us as the fame

of its superb pottery, peerless among Ionian types of the sixth century B.C.

Samos, Cos, and Leros were occupied by the United Nations, September, 1943.

Cos

Coming from Ephesus "by a straight course" en route to near-by Rhodes (Acts 21:1), Paul spent one night at Cos, a small island of the Italian Aegean group off the southwest tip of Asia Minor. It is another steppingstone to men envying the oil and mineral wealth of the ancient Middle East. Many of its people are Moslems, speaking Anatolian Turkish. Yet its Genoese Crusader castle recalls days when Christian knighthood was "in flower." Its extensive Asklepion built in the fourth century B.C. harks back to an era when Greek religion and medicine went hand in hand, as at French Lourdes today. The sacred spring, hospital, and temples of Asklepios, the Greek god of healing, attracted to Cos the father of medicine, Hippocrates, whose oath of ethics is administered to graduates from colleges of medical arts the world over. A giant plane tree "of Hippocrates" is still shown in Cos. Carvings of the symbolic snake of Asklepios are numerous here.

RHODES

Paul on his third missionary journey (Acts 21:1) put in at Rhodes the day following his halt at Cos. Many scholars believe that St. Paul's Bay below Lindos on the east coast is the harbor (illus. 145) where his ship dropped anchor, below the richly ruined acropolis where pre-Hellenic people had a temple to Artemis (Diana). Parts of a Doric portico and a temple cella from the fourth century B.C. are among the debris on that windy island hill. Long lists of famous ancient travelers have come out from Asia to Europe through this port. Lindos was noted for its fine pottery. Ancient Persian designs and lusters were fashioned in Rhodes. And the great sculpture of the Laocoön group portraying a priest of Apollo and his sons being avenged for distrust of the wooden horse by encoiling

serpents, came from the Rhodian masters, Agesander, Polydorus, and Athenodorus (40-20 B.C.).

It is doubtful whether St. Paul ever entered the city of Rhodes at the north tip of the island, founded late in the fifth century B.C. Yet he is honored there in the massive Gate of St. Paul (illus. 146) opening onto small craft bobbing in the commercial harbor of the Knights Hospitalers of St. John of Jerusalem. Because of their vigorous Christian faith these knights built and walled one of the most romantic cities of the Middle Ages. The palaces of Grand Masters, the steep, auberge-lined Street of the Knights with armorial bearing over doors; turreted drawbridges; the enormous Hospital of the Knights; the Church of St. John; the busy waterfront for coastal traders—all lived again under recent Italian restoration. Many were damaged in the bombardment of Rhodes by Allied planes in March, 1942.

For Rhodes was "the most logical jumping-off place for a spearhead attack on Near East oil," as well as on Syria, Palestine, Suez, and possibly Egypt—not to mention Anatolian Turkey. Before the war, amphibian planes were plying between Rhodes and Rome. We have seen them lighting near the mole where stood the Colossus of Rhodes made by Chares of Lindos—a wonder which Paul could not have seen, for it fell into the waves in an earthquake of 224 B.C.

Rhodes, regarded by Phoenicians of the tenth century maritime world as a pivotal outpost, had three cities which were buffers by which Dorian colonists in Asia Minor protected themselves against hostile neighbors. It has ever been at the watery crossroads of the East, where courses from Crete to southwest Asia crossed routes between Greece and Syria; or routes out of the Black Sea moved south to join the main east-west Mediterranean sea route between Gibraltar and Suez. Hence Rhodes was ever a rich middleman, transshipping hides, pottery, fruits, grains, linen, cattle, flax, milk products, sponges, murex purple, fish, honey, and slaves. Her enormous prosperity formed substantial basis for a great art development. Little wonder that her beautiful silver coins with heads of

the sun-god Apollo and the rose of Aphrodite were at a premium.

Rhodes showed herself a forerunner of transatlantic convoys, for she escorted with armed ships her merchant marine, exposed to pirates as modern ships have been exposed to enemy submarines.

It is easy to overlook in the long name lists of the Old Testament certain interesting implications. The "table of nations" of Gen. 10:4, which attempts to account for the origin of peoples, includes as sons of Javan ("Ionian"): Elishah (possibly Sicily or Carthage, according to Sayce); Kittim, or Cyprus; and Dodanim. A similar list in I Chron. 1:7 translates "Dodanim" "Rodanim." Can these be our Rhodians?

CRETE

Paul's reference to Cretans as unruly brawlers, overthrowing houses in sharp riots (Titus 1:6-11), is consistent with the unfortunate history of these rugged mountain islanders. Guerrilla skirmishes of Cretans joined with British long protested against Nazi occupation. Civilians went on maintaining life with herbs, snails, and nuts, faring better than folks at Athens because they have never been accustomed to much better fare than herbs, snails, and nuts. The Germans began their final "push" on Crete in May, 1941.

This island, 160 miles long, seems to be a broken-off portion of the Greek peninsula, whose Cape Malea lies only 60 miles northwest. It looks like a giant foot, walking towards Cyprus and Asia Minor—which it did approach with its cargo-laden ships in a vast maritime empire fourteen centuries before Christ.

The brief biblical references to Crete seem all out of proportion to the importance of this mid-Mediterranean steppingstone between Greece and Egypt. We know that Cretans who had come to celebrate the Feast of Weeks were in Jerusalem on Pentecost in A.D. 30 and spoke in their own tongue the "mighty works of God" (Acts 2:11). They were always great travelers, a folk who appear to have originated in southwest Anatolia and emigrated to Crete between c.4000 B.C. and 3000 B.C. Paul on his fourth missionary journey halted a short time at *Fair*

Havens, a port on the south-central coast of this island. First Christian believers in Crete may have been fruits of Paul's work based on Corinth or Ephesus. His later visit, described in Acts 27:6-15, was incident to his trip to Rome for trial. After leaving Asiatic Myra in an Alexandrian grain ship and sailing in the lee of Crete, Paul warned the navigator that it was too late in the fall to continue west. But his advice was acceptable neither to the centurion escorting him nor to the master of the ship. And because *Fair Havens* was too crowded, an effort was made to reach the little port of Phoenix in southwest Crete, to winter there. Caught in the teeth of a wild Euraquilo tempest, however, the crew was fearful of being washed onto the North African coast ("The Syrtis"). Matters went from bad to worse and were climaxed in the wreck off Malta (Acts 27:27-44). Then was Paul's moment to rub in his unheeded advice: "Sirs, ye should have hearkened unto me and not have set sail from Crete."

In Paul's letter to Titus, he says, "I left thee in Crete" (1:5) to appoint Christian elders in every city; to separate islanders from their love of "filthy lucre" (v. 7); to teach them to be "given to hospitality . . . just, holy, self-controlled," obedient to rulers, devoted to their families, professing their knowledge of God by the purity of their lives. Affirming the statement of one of their own Cretan poets, Epimenides, who had called them "always liars, evil beasts, idle gluttons," Paul bolstered up his Gentile helper Titus to "reprove them sharply" (v. 13). It is possible that Paul, on release from his first imprisonment, had gone with Titus to the island and established him before leaving.

The Apostle, who visited historic and religious sites in his ports-of-call, was in no mood to seek out the palace of the famous sea-kings of Crete, even if they had not been then buried under mounds of debris near the north shore at Knossos. This thrilling wealth of archaeological treasure was revealed in our own era by Sir Arthur Evans of Oxford University, founder of Minoan archaeology. His colleagues dug for thirty years (from 1900 on) until they reached Neolithic bed-

rock deposits, discovering Neolithic homes of several rooms with fixed hearths, and Lower Neolithic bowls incised with zig-zags on their burnished clay.

Evans' discovery in Athens of primitive Cretan script and engraved seals for which Cretans were famous led him to suspect that a wealth of architectural and artistic treasure was buried in Crete. Scholars had been dating Greek civilization from the first Olympiad, reckoning from the games of 776 B.C. Evans followed the roots of Greek culture down many centuries further (c.2600-1400 B.C.), when vigorous sea-king-builders, Minoans, founded ways of life which, under the name "Mycenean," emigrated to Greece and thence to Europe. The verified intuitions of Evans have enabled Crete to hold its head high beside the Nilotic and Mesopotamian cultures. By 1400 B.C. the greatness of Crete was on the decline, and the island became just a breakwater for Greece in its golden fifth century B.C. Through pottery sequences we read dates in Crete, by comparison with known Egyptian types. For, although the chief harbors of Crete faced Greece, her major influence artistically and commercially came from Egypt.

Some three miles southeast of modern Candia (Herakleion) is the amazing six-acre layer cake of excavated palaces of Minos, greatest of the sea-kings of Crete. In fact, the word "Minos" may be a title belonging to a series of rulers, for the Minoan Period began c.2600 B.C. and ended with Later Minoan culture some two centuries after the catastrophic fall of the capital in c.1400 B.C. when the Amenhotep dynasty was ruling in Egypt. The downfall of Minoan civilization at its peak was due to a sudden invasion, possibly by colonists who had gone from Crete to Greece and were ousted by some Danubian race pushing south. No mere earthquake, frequent in Cretan history, could have overthrown so utterly the elegant prosperity of this island kingdom whose commercial docks and factory towns dotted the whole Mediterranean. But that collapse, like the collapse of Crete in May, 1941, when British, Greeks and Cretans surrendered the great naval and air base at Suda Bay, led to a desperately dark Iron Age—in which we are still living.

Archaeologists discovered at Knossos a succession of destroyed and rebuilt palaces with a maze of winding passages. They believe beyond doubt that these fascinating courts, wings, pavilions, store areas, and characteristic light-wells comprised the labyrinth of mythological fame, built by Daedalus, chief artificer of the court of King Minos. The word "labyrinth" means "place of the double axe," which enigmatic symbol of the Cretan bull was significant in the iconography of Asia Minor.

What has been called "the oldest road in Europe" is a paved stretch of city street uncovered at Knossos. It linked the palace with the ancient transisland highway over which merchandise and emissaries from Egypt moved back and forth. Flanked with homes and an arsenal, it was never a lonely highway. The main fork of this road led to the caravansary, or inn-stable-warehouse, whose amenities included sunken footbaths for traders and the weary drivers. Water flowed from these spring-fed baths to troughs for animals. The setup reminds us of the Caravan Mosque at Damascus, still doing business.

The famous bull ring where Athenian maidens and youths were sacrificed to the legendary Minotaur, half-human son of King Minos, is thought by Evans to have been located between the river and the palace laundry. This sacrifice of Athenian youth may simply express commercial tribute paid to Crete.

The bull-lore of Crete is confusing, although there is no archaeological reason to believe that the splendid Cretan bull was ever worshiped. Minos, the law-giving king, was deemed demigod, son of Europa, the purple-robed Phoenician princess for whom the continent was named, and of Jupiter, who, disguised as a bull, carried Europa to Crete on his back. No wonder Paul considered Cretans liars, who claimed to have on their isle the tomb of Jupiter! Theseus, the Athenian hero who killed the Minotaur in his labyrinthine lair, led by the slender thread of Ariadne, daughter of Minos, may have been among the victims designated that day in c.1400 B.C., when he gave Cretan greatness its death-blow and made way for Greek glory. Some authorities try to explain the Minotaur as a Cretan general named "Minoan

Taurus." Others say that the king, son of the greatest Minos, was wearing a popular bull-head mask when he was conquered by Theseus.

At any rate, the bull motif was dominant in Knossos art. The finest bull's head from ancient times, in plaster high relief, was found by Evans near the north entrance to the palace.

Bulls also featured the chief sport of the island. Maidens and youths attempted to leap over the horns of infuriated bulls. Possibly these young people had been brought as prisoners and kept in pits until thrown into the arena, as Christians in Paul's time were tossed into Roman amphitheaters.

In ceramics Crete has yielded vast riches. The giant vases, Knossos pithoi, containers for oil, were found in situ in the store-chamber near the Loom-weight Basement. Their bands of snakelike trickle design are typical of 1900 B.C. Cretan clay vessels were also worked to eggshell fineness.

Frescoes of Knossos, such as the painted reliefs of the priest-king, the prowling pussy cat, the saffron-gatherers, and the torador, laid the foundations of European painted-plaster art we find in first century Pompeii and Herculaneum (see illus. 50, cupbearer).

Glyptic art of Crete has yielded beautiful seal-stones showing bulls; bell-skirted ladies with wasp-waists (illus. 23), dancing processions; and wild goats, cut in ivory, jasper, and crystal.

The sea-raiding islanders of Crete scattered their commercial and industrial colonies along the southeastern Mediterranean seaboard known in Old Testament times as Philistia. Its cities—Ashkelon, on the coast, Gaza, Ashdod, Ekron, and Gath—all lay south of Mount Carmel and the Plain of Sharon and west of the rugged Shephelah. Only Ashkelon was on the coast.

Yet, for all her amazing commercial, architectural, and art development, Crete contributed nothing permanent to Christian thought of the world. What inspiration is there in a double-headed ax on a pillar in a private chapel of the palace, or in a mother-earth-goddess with her snakes and ani-conic pillars?

CAUDA

Cauda, or Claudia, was a small isle southwest of Crete. In its lee, Paul's ship bore west to Malta.

MALTA

Malta was called "Melita" by the Greeks of Paul's time, because it produced so much honey. "That arid rock" is the epithet given it by Elizabeth Schermerhorn in her admirable *Malta of the Knights*. The little group of islands, only 60 miles south of Sicily, 140 from Europe, and 180 from Tunisia in North Africa, constitutes a crown colony of Great Britain. This heroic base of England's main Mediterranean fleet has survived countless bombings, with loss or injury of thousands of civilians. For its courageous endurance, the island has been awarded the George Cross and has been presented with a plaque by President Roosevelt. It has long been the strongest link in Britain's lifeline between Gibraltar and Suez. Time and again, when supplies were almost spent, convoys have brought reinforcements at terrific cost.

There is something still in Malta of the heroic Christian personality of Paul, whose experiences there are given more detailed New Testament discussion than his sojourn in other islands. The account of the shipwreck which tossed him ashore is as famous as the well-known "bridge-building passage" in Caesar's *Commentaries*. The author of Acts 27:27-28; 11 describes fourteen days of tossing in the Sea of Adria after the party left Cauda; the consolation rendered the terrified crew, similar to that offered by John Wesley centuries later in an Atlantic gale; and the final running aground "where two seas met" (v. 41). This spot was probably St. Paul's Bay, seven miles northwest of the present capital of Valetta. Prior to the war, St. Paul's Tower and a chapel near the bay, with frescoes of the landing where "barbarians showed . . . no common kindness," were cherished landmarks; near-by Salmone Island was proud of its enormous statue of Paul. Certainly, the sight of violent waves, foaming rocks, and men casting themselves overboard and

swimming ashore (Acts 27) has been duplicated times without number in modern warfare off Malta.

The rain and the cold; the kindling of a fire from which a snake came and bit the Apostle's hand, so that he was called first a murderer and then, when the bite did not prove fatal, a god; the curing of the father of Publius, "chief man of the islands"—all help us picture the sojourn of Paul and Luke. Many came for healing, and the team received "many honors." Maltese converts gave a substantial *bon-voyage* party, with gifts, when the group left for Puteoli. For the narrative of Acts 28:10 says, "When we sailed they put on board such things as we needed." All these incidents were quite a build-up for the subsequent wealth of Christian tradition persisting in the crowded little fortress-isle.

In the ancient capital, Notabile, near the center of the island, there is a cathedral—on the supposed site of the home of Publius. Upon his conversion to Christian faith Publius made his house into a chapel. A larger structure, beautified by Roger, the eleventh-century Norman King of Sicily, supplanted it later. A "magic" fountain also graces this old town. We wonder whether venomless Maltese snakes, like the harmless creature which bit Paul, lurk about its waters. There is also a Church of St. Publius near the village of Floriana and St. Paul's Bay. And at Meliëha is a portrait of Mary, attributed by childish fantasy to Luke. Certainly, no one can doubt that the Maltese have endeavored to keep vivid in their memory the visit of St. Paul and his companions.

The heroic tradition of the Apostle inspired the Knights of Malta, or Knights Hospitalers of St. John of Jerusalem, who settled here in the sixteenth century after their order had withdrawn from Palestine, Cyprus, and Rhodes. Malta was deeded to them in 1530 by Charles V. The Grand Master de L'Isle Adam began the famous architectural adornment of the island. Some of its many *Auberges*, or "inns of the nations," organized by this "earliest international society" and some of its hospitals have "gone west" in the bombings, along with more than 15,000 homes, 70 churches, dozens of hotels, and many

banks. Yet the city holds on to its promontory, as Gibraltar to its narrow Rock, and carries on with amazing courage. The valiant heritage of Phoenician, Arab, Spanish, and Norman blood in the sturdy Maltese kept them resourcefully conducting "business as usual" underground, in enlarged tunnels made by the Knights. Down there, newspapers were published; and tea was served to soldiers as it has been by old gentlewomen of Malta in gardens for a century. Children were born and taught, aged tenderly cared for, and worship conducted. One commander in chief, Sir William Dobbie, did not even allow the blitzes to interrupt his nightly Bible class for service men, which he conducted underground.

The motto, "Let courage rise with danger," has been sustained in the Malta of Paul and Luke, and of the Grand Masters and the British staff.

Paul and his party stayed through the rainy winter in Malta and witnessed the brilliant burst of spring blossoms which entitles this rock to be fondly called the "Flower of the Mediterranean."

The three-month sojourn ended all too soon. They embarked on a ship from Alexandria, "The Twin Brothers," which before long put in at Syracuse.

SICILY

"Touching at Syracuse, we tarried there three days," wrote the secretary of Paul's journey to Rome (Acts 28:12).

Landing on Sicily, the largest Mediterranean island, a three-cornered chunk of the ancient land-bridge between Europe and Africa, Paul must have visited the Temple of Athena in Syracuse. It was erected by Greeks in the fifth century B.C. Syracuse founded by Corinthians was once the most powerful intellectual force among Greek cities. Its vigorous personality reached back at least seven centuries before Paul, when Phoenician traders used its beaches. Paul, as a graduate of the University of Tarsus and a student of Mediterranean lore, knew how the Syracusans late in the fifth century B.C. held back Etruscan sea-raiders and Carthaginian despoilers of the finer ways of life advocated by Greeks. Paul, the lover of

Christian freedom, must have pondered with resentment the tyrannies of Sicilian Hiero, Dionysius, and Agathocles. And he doubtless strolled near the semicircular rock-cut theater at Syracuse, begun before 420 B.C. with a geometric precision worthy of Euclid. The amphitheater was new, having been built in the Augustan period.

Paul today would ponder with approval the incorporation of columns from the converted Temple of Diana in Syracuse Cathedral. This temple was once adorned with doors of gold and ivory and an emblem of Medusa which guided mariners from afar.

From Sicily Paul's ship was whirled north between Scylla rock and Charybdis whirlpool until it had safely passed Messina Straits and headed north for Puteoli, his port for Rome. His work in this island lives on in the scenes painted on muddy Sicilian carts (illus. 148).

Many of the American men who engaged in the occupation of Sicilian Gela and Syracuse in July, 1943, will follow Paul's "landings" with greater interest than ever before.

PATMOS

Patmos is associated with John the Evangelist, as the other Mediterranean islands we have been discussing are tied in with experiences of Paul. Here the aged Evangelist was imprisoned under edicts of persecution of the Roman Emperor Domitian and was released about a year and a half later under Nerva. But the world is the richer for this island banishment, for out of its mountain cave came the Revelation of a "new heaven and a

new earth" which for beauty of expression and ultimate spiritual thought is unexcelled.

Patmos is off the southwest coast of Anatolia, one of the Sporades belonging to Italy but occupied by Greek Christians. It is only ten miles long and no more than six miles wide. A large part of it is owned by the Monastery of St. John, whose labyrinthine cluster of sacred structures occupies the summit of the craggy isle. Over the door of its hospitable guest quarters, where strangers are entitled to three days' free lodging, are the famous words, "Receive the stranger, that ye yourself be not a stranger before God." John of Patmos lives on in the little churches on various levels of the steep slope and in countless chapels in the town below. Some of these, says Dorothy Hosmer in *National Geographic Magazine* April, 1941, look like Eskimo igloos in a snowless heat, with crosses tipping their tiny domes.

No one seeing Patmos shining in the sun can fail to recognize its influence upon the details of Revelation. John, looking off toward his homeland, longed for a time when there would be "no more sea" to isolate him. He saw angels arrayed with clouds, and rainbows on their heads; their faces were as the sun and their feet as pillars of fire; they set one foot in the sea and another on the earth and stood with little books in their hands (Rev. 10). Sun, moon, stars, dragons, harps of God by seas of brass; the beauty of precious stones; the voices of many waters; the refreshing of rivers of life shaded by fruit-bearing trees—all these phrases reveal the setting supplied by the sun-baked Isle of Patmos for the glories of John's Apocalypse.

ADDITIONAL BIBLE REFERENCES

"the king Ahasuerus had laid a tribute . . . upon the isles of the sea" (Esther 10:1)

"Keep silence before me, O islands" (Isa. 41:1)

"Shall not the isles shake at the sound of thy fall?" (Ezek. 26:15)

"thou art the merchant of the peoples unto many isles" (Ezek. 27:3)

"men shall worship him [Jehovah] . . . even all the isles of the nations" (Zeph. 2:11)

BIBLIOGRAPHY

- American Schools of Oriental Research, *Bulletin* No. 83, p. 16, New Haven.
- Baikie, James, *The Sea Kings of Crete*, A. and C. Black, Ltd., London.
- Burn, A. R., *Minoans, Philistines, and Greeks*, Alfred A. Knopf, New York.
- Cesnola, Louis di, *The Antiquities of Cyprus*, W. A. Mansell, London.
- Evans, Sir Arthur, *The Palace of Minos*, Macmillan & Company, Ltd., London.
- Gardner, Helen, *Art Through the Ages*, Harcourt, Brace and Company, New York.
- Hall, Henry R., *Aegean Archaeology*, G. P. Putnam's Sons, New York.
- Hill, Sir George, *History of Cyprus*, Cambridge University Press, Cambridge.
- Hosmer, Dorothy, "Rhodes and Italy's Aegean Islands," *National Geographic Magazine*, April, 1941.
- Life*, articles: "Malta," February 12, 1943, and "Sicily," July 26, 1943, August 2, 1943, New York.
- Moran, Charles, *Sea of Memories*, Charles Scribner's Sons, New York.
- Ordway, Donald, *Sicily, Island of Fire*, Robert M. McBride & Company, New York.
- Pendlebury, John D., *The Archaeology of Crete*, Methuen & Co., Ltd., London.
- , *Handbook to the Palace of Minos at Knossos*, The Macmillan Company, New York.
- Schermerhorn, Elizabeth, *Malta of the Knights*, Houghton Mifflin Company, New York.
- Semple, Ellen C., *Geography of the Mediterranean Region*, Henry Holt and Company, Inc., New York.
- Ward, John, *Greek Coins and Their Parent Cities*, John Murray, London.

JEWELRY

Thou settest a crown of fine gold upon his head.

—Ps. 21:3

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Palestinian Poverty of Jewels	Jewels for Rebekah
Exceptions at Excavated Megiddo	Gems from Ur of Abram
Jewels Seized by Jehovah in Times of	Golden Marvels of Queen Shub-ad
Apostasy	Northern Mesopotamian Gems
The Golden Calf and Its Satisfactory	Later Jewelry of the Ancient Near East
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INTRODUCTION

What has jewelry to do with the Bible? More than we at first imagine. Sometimes it got very much into the way of the unfolding religion of ancient Israel. Again, it was a beautiful auxiliary to its expression.

Prehistoric people in Bible lands fashioned articles of personal adornment. We have already referred to Natufian necklaces of shell, bone, and fish vertebrae, fashioned

on the shores of the Mediterranean below Mount Carmel 10,000 years ago. Both men and women wore these necklaces, as well as headdresses, to their graves. Some have been found by archaeologists.

PALESTINIAN POVERTY OF
JEWELS

The art poverty of Palestine is well-known. The contributions of this small

strip of land between Jordan and the sea were in the realm of the spirit, not of gleaming material gems. Gold and silver were not common, even as late as 1000 B.C. Iron was so scarce before Saul and David and Solomon defeated Philistine iron monopolists (c.1013-973 B.C.). This heavy metal was used for jewelry of kings. A pair of iron anklets was found by Elihu Grant at biblical Beth-shemesh, dating, according to the *Biblical Archaeologist*, from about the time of David's accession. After this Hebrew king's conquests his people had so much iron in their new Iron Age that they used it no longer for jewels but for javelins, chisels, nails, saws, arrows, spears, and possibly for harrows. And as evidence of the art stimulus resultant from Solomon's smeltery development at Ezion-geber at the head of the Red Sea's Gulf of 'Aqabah (illus. 34) there is a necklace of carnelian, agate, alabaster, and glass beads for which we are indebted to Nelson Glueck's expeditions in Transjordan. This necklace is not unlike ones we have bought in Istanbul's bazaars recently.

But by and large, Palestine itself has yielded to the spade of the excavator little indigenous jeweled art. When we appealed to a likely source for a picture of ancient Palestine jewels for this book, we were told that there were few available. And when we look at art fragments from the hilltop palaces of the kings at ornate Samaria, we see that these are the work of imported artists—Assyrian, Aegean, Egyptian, Syrian, Hittite, and Phoenician. At Canaanite Megiddo, the same holds true. Let us glance at the ancient ivories and the Megiddo treasure for a moment before going on to "precious things" of Old Testament narratives.

EXCEPTIONS AT EXCAVATED MEGIDDO

Jewel and ivory finds at Megiddo, fortress-city guarding the Plain of Esdraelon where Mount Carmel Pass abuts on Armageddon, have come from the meticulous excavations by the Oriental Institute of the University of Chicago, inaugurated by James H. Breasted, and financed by Rockefeller funds and other gifts. Illustration 47 shows a Canaanite lady in ivory

with inlaid eyes, used as a furniture ornament. She may have been part of a Megiddo palace treasure destroyed by invaders in the 12th century B.C.

Advancing conquerors, following up the victory of Deborah over Canaanite forces under Sisera in the period of the judges, swooped down on the city so suddenly that citizens left their jewels behind. Some of these are seen in illustration 156—a golden fillet, earrings, pin, beads, and scarab rings in swivel settings. Marked Egyptian influences, in the headdress and jeweled collar of the ivory lady and in the scarab rings, indicate the cosmopolitan setup of Megiddo, where Canaanites mingled with Aegean islanders and Egyptian craftsmen, as well as with Hittites and Mesopotamians. Probably Solomon carted off to Jerusalem hoards of jewels from Megiddo, which he made a chief chariot city guarding Esdraelon's food gardens and the strategic Carmel pass by which armies marched from Syria to Egypt.

Robert Engberg writing about "the Last of the Canaanites" in the *Biblical Archaeologist*, describes the Canaanite Megiddo which became an Israelite stronghold soon after Deborah's battle at the Kishon, an Old Testament epic which now appears quite historic (Judg. 4, 5).

The throne of Solomon was in itself an art gem. Made of ivory, or trimmed with this popular material, it was overlaid with gold (II Chron. 9:17). The steps leading to it were of gold; and of gold was the king's footstool. So, too, were his drinking vessels and all the vessels in "the house of the forest of Lebanon" (II Chron. 9:20). For those were years when armies of tribute-bearing slaves came from afar, bringing apes, ivories, and peacocks for the court of Judah. Gold was "nothing accounted of," and silver was as plentiful as stones which dotted the highland round about Jerusalem, then, as now. And "all the kings of Arabia and the governors of the country brought gold and silver to Solomon. Then, to all this, the astonished Queen of Sheba, rich from her spice and camel trade in western Arabia, added "gold in abundance, and precious stones" from Ophir mines and from her pearl fisheries on the Red Sea.

JEWELS SEIZED BY JEHOVAH IN TIMES OF APOSTASY

Old Testament writers, such as Ezekiel, time and again mention seizure of Israel's gems as punishment for turning to the Baalim and the lewd Asherim goddesses of their neighbors. Ezekiel tried to terrify Israel into goodness by telling them of Babylonians, Chaldeans, and Assyrians, honorable men, princes of fame, who would come fully armed, "riding upon horses," of which Hebrews then had few, to strip them of their jewels and their fair garments (Ezek. 23:26).

But often ancient Hebrews lost their heads completely when they came into contact with the jeweled riches of their neighbors. Hosea told them in the eighth century B.C. that they had forgotten that it was Jehovah who had given them silver and gold, as well as oil and vines. They went to worship Baal, decked out in rings and jewels as if they were going after lovers rather than after Jehovah.

THE GOLDEN CALF AND ITS SATISFACTORY SEQUEL

One of the highlights of jewel sagas in Old Testament epics is in connection with the Hebrews' departure from Egypt. At Moses' own suggestion, each emigrant demanded of his Delta neighbor "jewels of silver, and jewels of gold." We wonder why, with Egyptian bazaars then and ever since crammed with jeweled wares, the departing exiles did not get them by purchase rather than by polite loot. We marvel at the acquiescence of the Egyptian donors, stressed three times in the Exodus record. Even if we explain the treasures by Jehovah's "giving the people favor," we must admit that international procedures have improved down thirty centuries.

Yet the easy acquiring of "precious things" had a disastrous sequel. For while Moses, according to the author of Exodus, was on Mount Sinai, receiving from Yahweh the laws by which future generations might live wisely, Aaron, his adjutant, asked the Children of Israel to break off the golden earrings which men and women were wearing and to surrender them to

make a golden calf. This plan is reminiscent of the Egyptian bull-worship which they had just left behind (illus. 17, Egyptian mummified bull). The people gave. Aaron melted the scrap and, taking a graving tool, fashioned with surprising skill a golden calf so dazzling that his gullible followers fell down and acclaimed it as one of the Egyptian gods who had released them from Egypt's slavery (Ex. 32:4). Proclaiming a public feast, with merriment and burnt offerings to the calf of gold, Aaron and his friends "sat down to eat and to drink, and rose up to play." Upon Moses' return from the mount he became enraged at the frivolous apostasy of his people, seized the odious emblem, burned it, ground it to powder, scattered the gold dust on water, and compelled the people to drink the solution. The cowardly Aaron, discounting his personal art-craft, gave the fire the credit for having spontaneously formed the golden object: "I cast it into the fire, and there came out this calf" (Ex. 32:24).

But either the people did not surrender all their jewels, or they soon seized others on their way through the wilderness. For we read that in penitence they stripped themselves of ornaments from Mount Horeb on. Moreover, at Moses' request, they surrendered for the first Tabernacle "Jehovah's offering" of gold, silver, and brass to make lamps, vessels, gratings, pins, gold-plating, silver sockets, and screens for the sacred tent and its court.

JEWELING THE EPHOD

And for the priest's ephod with a jeweled breastplate, the men and women sacrificed with willing heart "brooches, and earrings, and signet rings, and armlets, all jewels of gold." The women spun blue, purple, and fine linen for the Tabernacle, and the men brought dyed rams' skins: Hebrews long excelled in the art of dyeing in deep, rich colors. In this great national co-operative enterprise, such as twentieth century America dedicated to metal conservation and war promotion, the "rulers brought onyx stones, and stones to be set."

The resultant jeweled breastplate has given us one of the famous insights into

gems of early Israel. In view of recent archaeological art-finds in Mesopotamia, home of the Patriarch Abraham, we can easily believe that early Israel could and did fashion this handsome religious accessory. Exodus 39 describes the ephod as square, with four rows of three stones each, one gem standing for each of the twelve tribes of Israel: "A row of sardius, topaz and carbuncle was the first row; and the second row, an emerald, a sapphire, and a diamond; and the third row, a jacinth, an agate, and an amethyst; and the fourth row, a beryl, an onyx, and a jasper."

Each stone, set in a gold mounting, had incised upon it by a skillful engraver, who made the coveted signet rings and cylinder-seals, the symbol of one of the twelve tribes of Israel. One list of assignments runs thus: Reuben, sardius or ruby; Simeon, topaz; Judah, carbuncle; Dan, emerald; Naphtali, sapphire (lapis lazuli); Gad, diamond (crystal); Asher, figure; Issachar, agate; Zebulun, amethyst; Benjamin, beryl; Manasseh, onyx; Ephraim, jasper.

Golden rings and chains fastened the gleaming breastplate to the ephod of the priest at his shoulders and to the blue lacers of the woven bands (Ex. 39:22ff.). Much gold went also into the miter of the priest. A notable collection of ancient European breastplates belongs to the Jewish Theological Seminary of America in New York.

An ephod story colors the epic of Gideon, who in the period of the judges saved his people from Midianite raiders and turned down the offer of kingship, preferring the theocracy of Jehovah. Similarly, the spiritual Crusader Godfrey de Bouillon twenty centuries later declined kingship of Jerusalem because he deemed it greater honor to be Guardian of the Sepulchre of Christ. But Gideon did request every man to cast into a spread garment all the golden earrings, 1,700 shekels' weight of gold, and the crescents, pendants, and camel chains captured from the desert-dwelling Midianite traders, men such as had stolen Joseph from Dothan and carried him with their caravan to Egypt several centuries before. Gideon made an ephod and trimmed it with this jeweled

wealth (Judg. 8:22-35). But as soon as he was dead, Israel again turned to worship the Baalim, especially Baal-berith.

RELATION OF "PRECIOUS THINGS" TO OLD TESTAMENT IDEALS

APPROVAL

As early as the days recorded in Genesis and Exodus, it was deemed fitting for people to array themselves on holy days in their best garments and such jewels as they had acquired from patriarchal thrift like Abraham's. Wealth was often safest and most portable in the form of gold ingots and ornaments. Even a storming prophet like Ezekiel expressed the love of Jehovah for his people in terms of his decking them with ornaments, putting bracelets upon their arms and chains about their necks (Ezek. 16:11, 12). Isaiah saw Israel as a diadem in the hand of God (62:3). Again he saw her adorned "with a garland, as a bride adorneth herself with her jewels" (61:10). Kings of Judah were not rebuked for having such royal treasures as Hezekiah's "all manner of goodly vessels." Nor was David chastised for including in his bureaucracy, alongside his overseers for camels, chairmen of olive-production boards, and directors of cattle farms, one Azmaveth, keeper of royal treasures. These hoards have long been the goal of inquisitive excavators, as well as of ancient tomb robbers. They still remain in hiding or were carried off in siege. They are definitely hinted at in the crown of Ps. 21:3, and in "much of his gold" of Ps. 19:10.

CROWN JEWELS OF THE HOUSE OF DAVID

The royal jewels of David included not only the crown, possibly golden but not jeweled, which descended to several rulers, but also buckles, shields, and spears and were kept in the House of God. When little Joash, the seventh king (836-796 B.C.), was brought from his hiding two centuries after David, they "put the crown upon him, and gave him the testimony, and made him king" (II Chron. 23:11).

The great incident in connection with David's jewels came when he capitalized his vast booty gathered in conquests against Syrians, Moabites, Ammonites, Philistines, and Amalekites, added these and his shield of gold to "exceeding much copper," and brought them to Jerusalem to dedicate to Jehovah (II Sam. 8:7, 8). This hoard of gems became the foundation of the royal fortune turned over to his son Solomon, who augmented it for the building of the Jerusalem Temple.

Calling his subjects together on Mount Moriah, David told them that, although his son Solomon was yet young and tender, he was turning over to him for the great national purpose a dazzling fortune. The pages of I Chronicles 28, 29 remind us of wartime collections of metal in 1942 or of the donation of gold wedding rings by Italians for their Ethiopian campaign of 1936. When the nobles saw what their king was donating, they brought gold, silver, brass, and iron, in weighed units—for the word translated "darics" in I Chron. 29:7 is an anachronism. No Mediterranean people had coined money until about three centuries after David's reign.

To the contributions of king and people, rulers and military officers added what they could. And when all was piled up, it was an impressive mound of precious scrap. Monarch and people rejoiced because "with a perfect heart they offered willingly to Jehovah." Then David called a national assembly at Jerusalem, before whom he pronounced one of the kingliest utterances ever spoken. He attributed all this jeweled wealth to Jehovah's mercies, climaxing his thanksgiving with the inspired phrase which many Christian churches today chant, as ushers hand to the minister the offerings of the people: "All things come of thee, O Lord, and of thine own we have given thee" (I Chron. 29:14).

We gain some idea of the vastness of David's treasures by seeing what he turned over to his son Solomon for building the Temple at Jerusalem: solid gold vessels, whose value was computed by weight (I Chron. 28:14), vessels of silver, weighed; gold for the golden candlesticks and silver for silver lights; weighed quantities of gold from Ophir to make tables for the shewbread and to overlay the walls of the

Temple houses; pure gold for basins and ceremonial cups; refined gold, by weight, for the altar of incense; and gold for the cherubim and "the chariot." In addition to the fabulous quantities of precious metals, David's treasure included onyx stones and "stones to be set, stones for inlaid work, and of divers colors, and all manner of precious stones, and marble stones in great abundance." Together with his own outpoured gifts of precious things, David donated for the future house of God the decorations which the court craftsmen would turn out.

To his great inherited wealth Solomon added metal and precious things acquired by exploitation of neighboring kings, by marriage with heavily dowered Egyptian wives, and by his own business enterprises at Ezion-geber.

GEMS AS METAPHORS

Not only was jeweled wealth used for "heave offerings" and "trespass offerings," but it furnished Hebrew writers with terminology. The Old Testament wisdom-writers spoke of the gaining of understanding as more profitable than "gaining of silver" (Prov. 3:15). A worthy woman's price, as contrasted with an ordinary wife sold to a desert-dwelling nomad, was "far above rubies."

In one of the greatest gem lists of the Bible, the author of Job shows an amazing knowledge of the mining life of his day:

Surely there is a mine for silver,
And a place for gold which they refine.
Iron is taken out of the earth,
And copper is molten out of the stone.

—Job 28:1, 2

Then the writer describes men digging in shafts, swinging to and fro, as they "hang afar from men," extracting from the inner fires of the earth sapphire and gold dust and rock crystals as they cut channels among the rocks and their eyes behold "every precious thing." And yet understanding is greater than these wonders, richer than onyx and gems and gold of Ophir, and richer than pearls and coral from the sea or glass from the furnace or topaz from Ethiopia.

SOURCES OF ORNAMENTS

WAR BOOTY

War brought Israel heaps of booty in metals. Moses himself, after seizing booty from Midianite caravan traders, made an oblation before Jehovah in the tent of meeting. This "heave offering" included bracelets, ankle chains, signet rings, earrings, and armlets (Num. 31:54).

This shifting about accounts for part of the jewel scarcity in present-day Palestine. Judah, in one encounter with Moab and Ammon, was three days stripping the enemy of precious jewels. What became of them all?

BETROTHAL GIFTS

Personal gifts also brought Bible folks into possession of jewels. A highlight in the Genesis narratives is the romance of Rebekah and Isaac, featured by the engagement gift carried from Canaan to north-west Mesopotamia by Isaac's servant with his caravan. This included "a golden ring of half a shekel weight, and two bracelets for her hands of ten shekels weight of gold" (Gen. 24:22), not to mention the nose rings. Indeed, the romantic emissary went still further and presented to the prospective bride fair garments for her hope chest. And "he gave also to her brother and to her mother precious things." Probably the accumulated wealth of Abraham's beloved Sarah was here put to use. We read of no such outpouring at the courtship of Rebekah's son's wife, the lovely shepherdess, Rachel. Had the gifts been lost?

ARTICLES OF JEWELRY IN OLD TESTAMENT TIMES

We have already referred to anklets, bracelets, diadems, necklaces, and rings for nose, ears, and fingers in many a Bible tale, and to gem-seals and crowns or coronets. There were also crescents for camels, gold nets for hair, pendants and mufflers, head-tire gems, jeweled perfume and ointment boxes, and jewel caskets. Amulets or pendants with magical meaning were always popular. At Ras Shamra

(fourteenth and fifteenth centuries B.C.) solar discs and lunar crescents sacred to the goddess of fertility possibly alluded to by Isaiah (3:18) have been found. At Bethshan, at the base of a temple in stratum V, jewelry and a pot of gold ingots, dedicated perhaps to Baal, have been excavated.

VARIETIES OF GEMS

Mention has already been made of several popular jewels, although their names do not correspond to our modern words for the same stones. The late Sir Flinders Petrie painstakingly tried to establish correct parallels for the breastplate and the foundation stones listed in Revelation. Jeremiah mentions sins of Judah recorded with a "pen of iron, and with the point of a diamond," but, as diamonds were not known at this time, probably rock crystal is implied. Ezekiel jots down one of the greatest gem catalogues in Scripture in his description of the fabulous beauty of the Phoenician port of Tyre, which had so many wholesale jewelers' shops and stone-studded palaces that she "walked up and down in the midst of the stones of fire." Every precious stone was her covering—"the sardius, the topaz, and the diamond, the beryl, the onyx, and the jasper, the sapphire, the emerald, and the carbuncle, and gold" (Ezek. 28:13).

Elephant tusks were lavishly used for ivory work, inlaid with colorful stones, carnelian and lapis lazuli especially. Turquoise was mined in Sinai and northern Egypt. Blue gems were especially prized. Of pearls we read more in the New Testament than in the Old.

GOLDSMITHS AND SILVER-CRAFTSMEN

To people in ancient Bible lands jewelry included objects of the precious metals, even when not studded with gems. At the court of every king, from the Minoan King Minos of Crete to the Tuthmosis and Amenhotep dynasties of Egypt and the Davidic line of Judah, special quarters were fitted for the goldsmiths who fashioned *objets d'art* for the court and sacred vessels for the shrines, the Benvenuto Cellinis of their era.

A silversmith sitting by his "fining pot" in the silver markets of ancient Damascus or of Jerusalem or of Memphis was a familiar sight. There he melted his metals and dipped articles he had carved in delicate filigree. Such a scene gave meaning to Prov. 17:3:

The refining pot is for silver, and the furnace for gold,
But Jehovah trieth the hearts.

Some of the pure gold necklaces being made today in Bible lands correspond to ones found in tombs of more than 3,000 years ago.

The Book of Ezra tells about the golden and silver vessels which tolerant Cyrus allowed the Jewish captives to take back to Jerusalem whence they had been looted by Nebuchadnezzar: "thirty platters of gold, a thousand platters of silver, nine and twenty knives, thirty bowls of gold, silver bowls of a second sort four hundred and ten, and other vessels a thousand. All the vessels of gold and silver were five thousand and four hundred. All these did Sheshbazzar bring up, when they of the captivity were brought up to Jerusalem" (Ezra 1:9-11). To these were added golden gifts from the rich and artistic Persians.

In the time of Nehemiah, the Jerusalem goldsmiths were competent to do their share in rebuilding the city wall. "Malchijah, one of the goldsmiths," repaired from Meshullam's sector to that of the Nethinim. "And between the ascent of the corner and the sheep gate repaired the goldsmiths," together with the merchants (Neh. 3:31, 32).

Among the solid-gold art and religious objects in Bible times were the candlesticks made in Solomon's reign for the Temple. There were originally ten of "perfect gold," yes, the Chronicler reiterates, of pure gold "according to the ordinance concerning them" (II Chron. 4:7). They stood on the right and the left of the altar, near the hundred basins of pure gold. The last appearance of "the golden candlestick" as we trace it through vicissitudes of the centuries was in the Forum of Rome, where its likeness is carved on the Arch of Titus, depicting the tragic hour in Jewish history when captives and their

native art alike were hauled to distant parts.

Egyptian-tomb low reliefs and models of craftsmen's studios in the Metropolitan Museum of Art and the Egyptian Museum of Cairo enable us to see the detailed steps by which ingots of gold became delicately wrought necklaces and amulets or gods.

Egyptians were prodigal in use of gold, covering it even with inlay of stones or enamel. The best example of this extravagance is in the solid-gold coffin of Tutankhamun and his mask of gold inlaid with gems and enamel. We who have had the privilege of photographing these in Cairo Museum are favored, indeed (illus. 154, gold mask).

Gold was known long before silver in Egypt. In fact, silver, which came from Asia Minor, was called "white gold" by Egyptian jewelers. Egyptians dug their gold from the eastern desert and along wadies, such as the Wadi 'Alaki, where its shining nuggets and gleaming particles attracted the attention of men long before they knew how to write of their findings.

Babylonians, too, were expert in goldcraft at a very early date. The glyptic artists, to whose amazing skill we owe the solid-gold cylinder-seals with their delicate intaglio designs incised deep in the metal, have put us in their debt for a wealth of artistic beauty (illus. 80). Accad-Semitic artists were doing their finest work in gold about 2800-2600 B.C.

SILVER CHALICES AND GOLDEN CUPS

People of Bible lands have always felt the charm of a wonderfully wrought cup of gold or silver. The chief butler of Pharaoh in the time of Joseph pressed fresh grapes into the royal cup and handed it to his lord (Gen. 40:11). One of the most famous cups of the Bible is the silver cup which was tucked by Pharaoh's steward into the mouth of poor little Benjamin's grain sack (Gen. 44:2, 12). Ezekiel, who lived at Babylon and knew court customs, referred to the cup of a court woman as being "deep and large" (23:32). Indeed, we see today that the Queen Esther cup recovered from Shushan, is very broad and shallow. The cup ex-



Pectoral pendant of Egyptian King Senwosret (1850-1835 B.C.) found in the tomb of his daughter Princess Sit Hat-Hor Yunet, near her father's tomb at el Lahun. Gold inlaid with precious stones, the cartouche of the king at center. Now in the Metropolitan Museum of Art. (Metropolitan Museum of Art)



150. An Eighteenth Dynasty scarab made "when Egypt ruled the east." Mounted in swivel ring setting. The seal side shows Egyptian triad, Isis, Osiris, and their son Horus.



151. Phoenician bronze bracelet in form of intertwined snakes, in the Metropolitan Museum of Art. (Metropolitan Museum of Art)



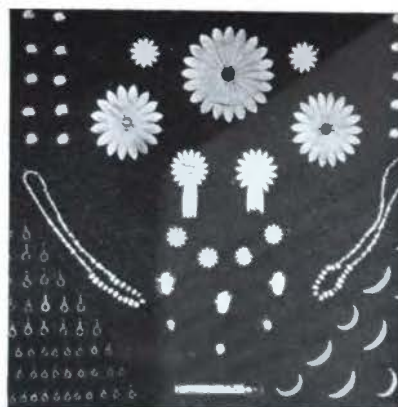
152. Head-tire of Queen Shub-ad of Sumerian Ur, before 3000 B.C. Note the gold flowers springing from "Spanish comb," fillet of golden leaves, heavy gold earrings, and various necklaces of semi-precious stones. (University Museum, Philadelphia)

153. Ensemble of Sumerian jewelry from the grave of a lady-in-waiting to Queen Shub-ad of Ur, dating from before c.3000 B.C. Necklace trimmed with golden beech leaves; earrings; beads; strips of gold. (University Museum, Philadelphia)



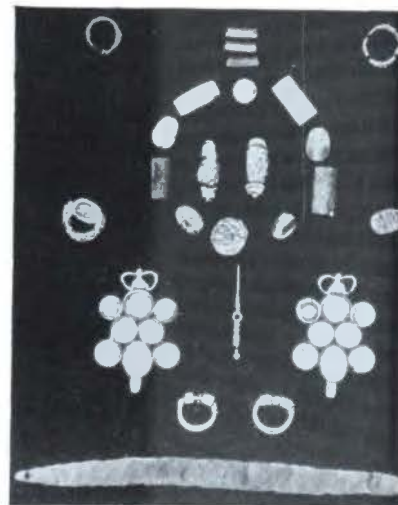


154. Massive gold mask which covered the head of Tut-ankh-amun. Rich materials and perfect goldsmith's skill depict, with stripes of glass and colored stones, the face of the young pharaoh, his royal head-cloth, and his broad necklace, ending in two protective falcons.

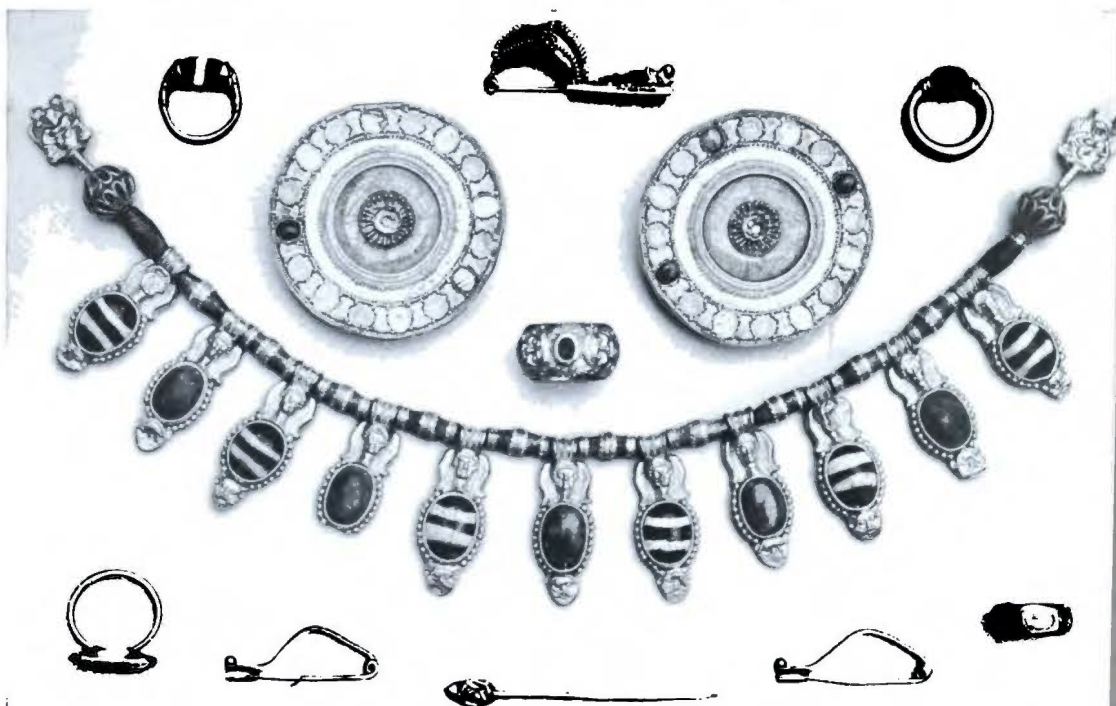


155. Gold and electrum objects from Mesopotamian Tepe Gawra excavations (University Museum, Philadelphia)

156. A gold headband, hair ornaments, and earrings of blue paste in heavy gold mountings; other jewelry found in the grave of a wealthy Megiddo woman of some 3,400 years ago. (Oriental Institute, University of Chicago)



157. Etruscan jewelry (c.500 B.C.): necklace, discs, fibulae (safety pins), and seal rings; gold, set in some cases, with glass or carnelian. (Metropolitan Museum of Art)



tended by Nchemiah to Artaxerxes when he was cupbearer to this mighty monarch in his palace "beyond the river" must have been wrought with designs in gold (Neh. 1:2). The corrupt court of Belshazzar drank wine from the Jerusalem Temple cups (Dan. 5:23).

The most famous cup of the Bible, the chalice used by our Lord at the Last Supper and the institution of our holy communion, was probably utterly simple. Perhaps it was of earthy clay, although there are those who believe that it was later encased in the *Antioch Chalice*. This much-discussed treasure is now owned by the Kouchakji brothers who claim to have secured it direct from Syrian Arabs digging a well near Antioch in 1910. You may read an excellent account of it by H. Harvard Arnason in the *Biblical Archaeologist* December, 1941, and February, 1942. Whether it was made in Antioch or in Alexandria, whether it encases the cup used by Jesus at the Last Supper, whether it bears an early portrait of Jesus—who has the final word?

Certainly the most precious allusion to a cup, is this: "And he took a cup, and gave thanks, and gave to them, saying, Drink ye all of it; for this is my blood of the new covenant, which is poured out for many unto remission of sins" (Matt. 26:28). This is the forerunner of the cup of Gethsemane, which the Saviour found hard to drain, because it was filled with the dregs of the world's sins: "My Father, if it be possible, let this cup pass away from me" (Matt. 26:39). The impression of the sin-filled cup persists through the last book of the Bible, where John of Patmos places in the hand of the woman of his Revelation a "golden cup."

Meanwhile, there is still refreshment in the cup used by Jesus for his most touching expression of loving service: "whosoever shall give you a cup of cold water to drink, because ye are Christ's, he shall in no wise lose his reward" (Mark 9:41). For illustration of a "cup of cold water" provided in Palestine today see illus. 229.

Cretan artists of the Late Minoan period worked with such skill in gold repoussé that they gave the world, in the *Vapphio cups*, *objets d'art* seldom if ever surpassed.

They are two in number, and until the conquest of Greece in 1940 they were housed in the Athens Museum. About 4 in. tall, with a handle on each, they carry in relief the theme of the Minoan bull in embossed golden glory. One cup shows wild bulls being netted with heroic labor of long-haired Cretan men; and the other, a more peaceful scene of bulls near rock-rooted Cretan olive trees. These two cups were discovered in a Spartan grave on the Greek mainland, to which an unknown ancient art connoisseur of long ago had carried them, even as a Nazi conqueror today may again have carried them off to foreign soil. We shall never know who was the Cretan "Benvenuto Cellini." Sir Arthur Evans believed that his school of goldsmiths continued until the Late Bronze Age. The embossing done by Minoans gave rise to the term "toreutic art."

The famous fluted golden goblet from Sumerian Ur, dating from c.3000 B.C., was found by Sir Leonard Woolley. It is now in the University Museum at Philadelphia. Its quality is so superb that Woolley says he cannot imagine finer goldsmith's work in any age. It just "could not be better."

WHAT BECAME OF OLD TESTAMENT JEWELS?

What became of all the jewels mentioned in the Old Testament? Many were buried in the ground for safekeeping in time of siege. Mother earth was the best safety vault. Others were carried off time and again by conquerors who kept these coveted precious things on the march. We know how the gleaming gold and silver Temple vessels and accessories were carried off by Nebuchadnezzar to Babylon and how some of them were brought back to Jerusalem when tolerant Cyrus sanctioned the return. The imagination of excavators has long been enthralled with the possibility of locating the treasure of the Hebrew kings somewhere under the deep rubble of city layers. Construction of military roads and defense works in Palestine recently has brought to light more archaeological treasures than scholars have yet had time to evaluate and file.

NEW TESTAMENT AND JEWELRY

The New Testament, with its emphasis upon the life of Jesus and the foundation of his Kingdom, is less graphic in its record of material environments. The characters in the great drama of expanding faith were not interested in the gems and gold which were dear to Hebrews in earlier periods of their spiritual development.

PAUL'S POLICY

When we do encounter jewel passages in the New Testament, they are generally condemnations. Paul, in his first letter to Timothy, rebukes vain, lewd women for wearing gold and pearl ornaments in their braided hair, relying on these, rather than on godly conduct, to give personal charm. Paul had seen all too much of the devastating influence of ungodly women in the teeming cities of Asia Minor. He forever associated with these Jezebels and Diana-worshipping types the lavish expenditures on gems and cosmetics, hand-woven garments, and lavishly applied perfumes. Once he had an open clash with Demetrius, the silversmith of Ephesus, who made images, possibly jeweled ones, of the goddess Diana. Her great temple in that Asiatic city had hoards of precious stones built into its foundations—gifts from worshippers.

JESUS AND JEWELS

However, Jesus had an appreciation of the beautiful, whether it existed in the serene peace of a shepherd and his flock; or in one gleaming, perfect pearl. He understood how such a pearl could be so wonderfully appealing even to a merchant of gems that he, having found this flawless jewel, was willing to sell the entire contents of his shop to acquire the treasure. Pearls in Jesus' time came from the Bahrain Islands on the east side of the Persian Gulf.

Jesus had a sympathetic understanding for the tastes of that pearl merchant and longed for people to have a similar enthusiasm for the Kingdom of God. Hence, his glimpse of the pearl merchant in his ex-

quisite parable. After he had uttered it, did he feel perhaps that he himself had been casting pearls before swine, an inelegant but certainly ever effective phrase through the ages? So many of Christ's wonderful truths he had seen trampled under the feet of his listeners, who turned and tried to rend him (Matt. 7:6). It is significant that the observing mind of Matthew gives us the only record we have of these two instances when Jesus mentioned jewels. Matthew, too, is our only source for the jewel-encrusted narrative of the gift-bringing Magi, who came to Bethlehem laden with their gold and perhaps with gems acquired in their merchandising of frankincense and myrrh along Arabian caravan routes. He, too, gives the story of the alabaster cruse of precious fragrant ointment (26:7), which probably was carved or ornamented as many ointment flasks were in that time. He, too, gives us the Parable of the Treasure hidden in the field, although he does not tell us whether the treasure consisted of gems, coins, or golden art-objects. Luke is our only source for the story of the virtuous woman's lost coin (Luke 15:8-10), to find which she ransacked her house with lamp and broom. This coin had been sewed to her headgear as part of her wedding dowry, and to lose one piece would have been to invite suspicion about her virtue.

Another jewel incident in Christ's teachings brings us close to his heart which understood so well the tastes and the customs of his people. He makes the father of the prodigal son go an extra mile at the party for which the kid was killed and the friends called in to make merry over his return of the lost son. He has his servant place not only a new robe on the boy's back and shoes upon his feet but a ring on his finger. Thus the son returned to normal human society, for with a family signet he could again sign business transactions on clay or parchment (Luke 15:22), imprinting the family name on the earthy seal.

JAMES

James in his epistle mentions a gentleman coming into a synagogue wearing a ring, the mark of material prosperity

(James 2:2). People who live at the subsistence level in any age do not have money for rings. Yet we have seen swarthy-faced Sudanese donkey boys in Syria and ragged bedouin women wearing rings set with turquoise and amber.

JOHN OF PATMOS

With a burst of jeweled glory like the brilliance of a Mediterranean sunset, the Bible closes its inspired pages. In Revelation, John of Patmos, describing the art-breastplate of the priest of Israel, lists an array of jewels which parallels the gems listed by the unknown author of Exodus. The late Sir Flinders Petrie has worked out tables showing the close relation between these two jewel lists. The foundations of the New Jerusalem were "adorned with all manner of precious stones"—jasper, sapphire, chalcedony, emerald, sardonyx, sardius, chrysolite, beryl, topaz, chrysophrase, jacinth, and amethyst. These twelve, according to Petrie, on page 619, Volume 4, of Hasting's Dictionary of the Bible, are closely related. In both lists, however, we must realize that the gems here called "sapphire," "amethyst," etc. are not the stones we know by these names. "Jasper" may have been our agate; "sapphire," so popular with all jewelers of the Near East, was probably our lapis lazuli, flecked with gleaming particles resembling gold. Their "red sard" was our garnet; and "milky quartz," our chalcedony. The "diamond" referred to by Jeremiah may have been our rock crystal, for diamonds were not known to most ancient peoples.

The author of Revelation pictures the destruction of Babylon (Rome) in terms of a merchant who can no longer sell "merchandise of gold, and silver, and precious stone, and pearls" (Rev. 18:12).

John, the mystic, has an appreciation of light and color, beauty of gems, and glory of stars above his island-prison at Patmos.

JEWELRY IN ANCIENT BABYLONIA

When scholars learned in 1927 that a section of Abram's city of Ur had been unearthed, they became interested in the

remarkable art which had been found by several expeditions headed by Sir Leonard Woolley for the British Museum and the University of Pennsylvania. Their finds at Ur on the Euphrates near its mouth, less than 200 miles southwest of Baghdad, were of dazzling beauty and of priceless worth in shedding light on an unknown period. "One find in a thousand," they were as startling as the Minoan discoveries of Evans in Crete. Woolley traced much of the art we know as Egyptian, Babylonian, Assyrian, Phoenician, Greek, and European to Sumerians who, before 3000 B.C., while Egyptians were still "barbarous," were turning out jewels and temples suggesting a long line of development from a still mistier past.

Sometime prior to 4000 B.C. the non-Semites we now call "Sumerians" arrived in the Plain of Shinar between the Tigris and the Euphrates rivers. Their original home may have been in the highlands between India and Iraq. We read of them in Gen. 11, which tells how Abram, son of Terah, lived in the city of Ur of the Chaldees, from which he started north to Haran en route to Canaan (c. eighteenth century B.C.). Abram must have seen art similar to what we see today in the University Museum at Philadelphia. Who can deny that the heirlooms presented by his son Isaac to Rebekah were from a Sumerian source?

SUMERIAN SPLENDOR

Looking at the amazing Sumerian gems from Ur of Sumer (or "of the Chaldees") in the University Museum at Philadelphia, we seem close to Abraham, a citizen of this remarkable city in the early second millennium B.C. Albright, the eminent American archaeologist, believes Abraham to have been a historic personality, not just the hero of a folk-myth. He sees two almost contradictory forms of the Abraham epic in Genesis. Perhaps there were two phases to the Patriarch's migration, one in Gen. 11, indicating his trek to Haran in the mountains of northwest Mesopotamia, and another in Gen. 12, including his journey to Shechem. Or, as Albright suggests, there may be two Genesis narratives about Abraham's journey.

Albright and Woolley differ as to the date and the ancestral home of Abram, but both make him live and move. Whether he spoke a west Semitic dialect of the Aramaean language and used a Canaanite speech after settling in Palestine does not matter much.

JEWELS FOR REBEKAH

But the romance of Rebekah and Isaac and of their jewel story stands clear of archaeological debate. Rebekah (Gen. 24:15) may have been a Mesopotamian Aramaean, living in the city of Nahor, grandfather of Abram of Ur. Her city of Nahor may be the Nakhur of the Mari tablets, thinks Albright. At any rate, the Nahor and Aramaean stock finds place in the Luke genealogy of Jesus (3:33-35). The Hebrew word for Aram, meaning "highlands," tallies with conclusions of those who believe that Abram perhaps spoke an Aramaean dialect before his journey west, and a Canaanite dialect after his settlement in his new home. Theories of the origin of Abram are so mixed that they all have some foundation.

However, it was neither genealogy nor a sense that Isaac's servant had come, bent on a Jehovah-built project, that influenced Rebekah's brother, Laban, to allow the maiden to depart on the long journey west. He sensed the bridegroom's wealth, indicated by the betrothal gifts. It was a good match. Little wonder that he called the clan and had them chant a betrothal ritual: "they blessed Rebekah, and said unto her, Our sister, be thou the mother of thousands of ten thousands, and let thy seed possess the gate of those that hate them"—a bit of oriental exaggeration, beautiful in its folklore.

GEMS FROM UR OF ABRAM

For the sake of Abraham, the biblical Patriarch, let us peer into cases at the University Museum in Philadelphia, marveling at jewels made in his native city about 1,000 years before his time. As Paul said of Tarsus, so Abraham might have said of Ur, "I am a citizen of no mean city."

We had heard Sir Leonard Woolley

himself tell of his discoveries, as he spoke from his own pictures. Thus we were gratified to see in Philadelphia not only the pre-Flood-level clay figurines but also articles from the matchless hoard of jeweled wealth he found at Ur in the Royal Tombs. In these chambers Queen Shub-ad, her husband, and her faithful court had been interred about 3500 B.C., according to Woolley—later, according to Albright. It is hard to realize that their golden gems may be older than the First Dynasty of Egypt. So fabulous was the treasure in the great death pit that excavators had to be wary lest they step on what peered from the earth. Paying the last price of loyalty to lovely Queen Shub-ad, sixty-eight court ladies had walked alive into the tomb, had sat down in orderly rows, and had received an opiate; in full regalia they had remained untouched from that day till A.D. 1927.

GOLDEN MARVELS OF QUEEN SHUB-AD

Sumerian artists 5,000 years ago achieved greater delicacy in their filigree than modern artists (illus. 152). In the Royal Tombs were found the Queen's personal ornaments, such as her diadem of minute beads, rosettes, flowerets, and palmettes of thinnest rolled gold and almost invisible wire. These details formed a background for tiny stags, antelopes, and bearded bulls. A net-work cape of polished gold, carnelian, lapis lazuli, and beads almost covered the body of the little queen. Twenty-nine finger rings turned up with her, and her two royal cylinder-seals, one of gold and one of lapis lazuli. It is marvelous that such small objects were found among the excavated rubble.

For use of jewelers' wire, see Ex. 39:3, in making the ephod.

The headdress of the Queen (illus. 152) was a unique gem. In fact, several of her court ladies and even warriors, whose skulls were found, wore their precious metal headgear, crushed into their bones. The Queen's was a jeweled cap of gold with silver fillets made of beech leaves, from which a three-pronged "Spanish" comb rose on slender golden wires stuck into her thick black wig. Two heavy, plain gold earrings were worn on each ear. And

around her neck was a "dog collar" of gold triangles alternating with carnelian and lapis-lazuli inverted triangles. Shub-ad was wearing garters of lapis and golden beads. She also had long gold pins and some fish-shaped amulets. Four other crowns were in her tomb-chamber. One, of tiny flowers alternating with slender leaves of Babylonian willow leaves, reminded us of those Babylonian willows described in Ps. 137:2, at the place where Hebrew captives sighed 1,000 years after the era of Abraham and Rebekah and more than 2,000 years after the time of lovely Queen Shub-ad, our early Babylonian feminist.

Of the sixty-eight women companions of the Queen, twenty-eight were wearing hair ribbons of gold metal. One bolt of "ribbon" in the Philadelphia Museum is still unwound: it was evidently dropped accidentally and never used, as its owner was hurrying to the burial.

We have already referred to the incomparable golden tumblers. Equally remarkable is the solid-gold helmet of the Sumerian warrior, Prince Mes-kalam-shar. Breasted considered it one of the finest pieces of goldsmith's art from all antiquity (illus. 114). The original is in London, but the replica at Philadelphia is handsome.

Queen Shub-ad has left us, also, her dainty cosmetic boxes, one in the form of a delicate golden shell. A paint-cup has a decoration of tiny ostrich eggs in gold, with inlay of carnelian and lapis. A silver toilet box for kohl, to darken her eyes, has a lid carved from a single piece of sea shell, showing a lion attacking a goat.

NORTHERN MESOPOTAMIAN GEMS

In *The Living Past*, Cyrus H. Gordon tells of remarkable ornaments dug from graves in the Tepe Gawra city mound in northern Mesopotamia, between two branches of the Tigris River, a short distance northeast of Nineveh and Khorsabad. Among objects of gold, silver, and electrum were ivory combs, banded with gold and rows of three varieties of semiprecious stones. See *Bulletin*, February, 1935, American Schools of Oriental Research.

LATER JEWELRY OF THE ANCIENT NEAR EAST

Because Old Testament pages carry us east of the Euphrates to realms of Assyrian, later Babylonian, and Persian kings, we have some interest in the jewels of these powerful dynasties. Such narratives as Ezra 4 indicate the tragic circumstances of people living in Jerusalem after the tolerant Persian Cyrus had let them return to rebuild their Temple. The empty coffin of heartless Artaxerxes, alongside tombs of other royal Achaemenid Persian personalities, has been discovered in a cliff behind the palaces of Persepolis, next to the rocky cavern once occupied by the body of the great Darius I (521-485 B.C.).

Although treasure rooms guarding art of the later Babylonians and Assyrians in London and New York contain the typical rings, carved gems, and amulets of their ancestors, the contents indicate that the art-interest of Hammurabi, Sennacherib, and Nebuchadnezzar, was in vast palace architecture and city gates. In Nineveh, capital of Sennacherib, 701 palace halls have been excavated by the Oriental Institute of the University of Chicago. And reliefs cut in alabaster, portraying scenes from Assyrian history, are almost two miles long. We associate not jewels but large-scale art with these large-scale conquerors of the ancient Near East.

RELIGIOUS ART IN EGYPTIAN JEWELRY

Egyptians more than any other people in ancient Bible lands gave their jewelry a sacred meaning. Sometimes, this was of no higher order than protective magic, "to keep the evil eye away" by wearing an amulet, as modern Egyptians still wear "the sacred eye of Osiris."

Among ancient peoples, Egyptians got off to an earlier start with their jewelry than any other, save the Sumerians alone, who before the third millennium B.C. excelled the skill of the Egyptians.

Scholars digging up evidences of life in prehistoric or predynastic Egypt (prior to 3000 B.C.) see evidences that men and women of 5200 B.C. wore crude bead

necklaces. The Metropolitan Museum of Art has strings of Badarian shell and stone necklaces and bracelets from c.3500 B.C. The Egyptian Museum in Cairo has a gold, turquoise, and amethyst bracelet from 3400 B.C. And the late Sir Flinders Petrie, in *The Making of Egypt*, stressed not only Badarian jewelry antedating 4000 B.C.; he suggested that the sturdy Hyksos horsemen 5 ft. 2 in. in height, who overran Palestine and Egypt (c. 1750-1546 B.C.), brought with them some very early granulated gold earrings probably from far-northern sources. The revival of art under Akhenaton (1387-1366 B.C.) restored some of the fine archaic ideals of the predynastic Egyptian artists, with stress on character portrayals of people and of gods. The same great Fifth Dynasty, which brought architectural development at Saqqarah near Memphis to a zenith of Egyptian fine art, saw jewelers polishing oval, spindle-shaped, round, and pear-shaped beads of agate, jasper, turquoise, lapis lazuli, and pearl from the Red Sea; and inlaying metal with blue and green malachite.

The Egyptian Department of the Metropolitan Museum of Art believes that jewelry reached its peak of beauty, color, design, and workmanship in the Twelfth Dynasty, that is, from c.2000 to 1780 B.C. From this era comes the delectable pendant (illus. 149) described in caption. In the predynastic period Egyptian jewelers, working with almost no tools, in difficult mediums such as ivory, bone, stone, and gold, were turning out charming animals, papyrus, leaves, and other designs from life which have always accented joyous Egyptian art—life now and life eternally. For consummate good taste Egyptians were seldom surpassed.

MATERIALS IN WHICH EGYPTIAN JEWELERS SPECIALIZED

SEMIPRECIOUS GEMS

The four stones which moderns call "precious" because of their beauty, rarity, and durability—diamond, ruby, emerald, and sapphire—were unknown in ancient times. But Egyptians were avaricious collectors of the chief semiprecious stones.

From the turquoise mines of Sinai Peninsula, emerald mines of Africa, and all the markets they knew, they drew pounds of lapis, carnelian, jasper, amethyst, carbuncle, chalcedony, and other stones. Alabaster (calcite) was a favorite material—whether the milk-white variety which went into the famous centerpiece of Tut-ankh-amun, shaped like a boat, with animal heads at prow and stern, or the creamy yellow alabaster seen today in mosques. Prior to the Eighteenth Dynasty, Egypt had so little iron that this metal, fashioned into a dagger by Hittite artists and presented to young Tut-ankh-amun, was appreciated even by this sumptuously jeweled monarch.

GLAZE

This vitreous, glasslike substance used by Egyptians became during the Old Kingdom of the third millennium B.C. popular for coating sacred amulets, figures of gods, beads, necklaces, scarabs, and even chairs. Its clear, deep-blue tones, secured from copper by a long process, are a chief trait of Egyptian jewelry. These blues remind us of the Mediterranean at midmorning. Glazes were at their best in the Eighteenth Dynasty, when colors had matchless depth and clarity, according to Steindorff and Seele (*When Egypt Ruled The East*). Glass originated in Egypt and Phoenicia.

Enamel, a higher form of vitreous glaze, was really a melted glass, mixed with gum and painted onto a backing of gold or silver. It was fired to hardness at a lower temperature than would fuse the metal itself. Enamel produced rich and lasting effects when surfacing Egyptian jewelry. It was never rivaled until the fine medieval French and sixteenth-century Russian enamel periods.

Inlay work was a favorite device of Egyptian jewelers, who made tiny framework designs of upstanding metal and filled them in with semiprecious stones, enamel, or faience.

Faience was the foundation substance of most of the Egyptian religious jewelry. It was a plastic, made by grinding up quartz and other materials to make tiny forms of animal-gods, which were then treated to a high glaze. Pottery and limestone molds

used in shaping these tiny amulets are in the Egyptian Museum at Cairo.

TYPES OF EGYPTIAN JEWELLED OBJECTS

It is a great moment for every lover of the beautiful when he steps behind the iron-grille doors guarding the treasures of the jewel-smothered mummy of young King Tut-ankh-amun in the Egyptian Museum. The collection, assembled by Howard Carter and the Earl of Carnarvon upon the discovery of the tomb in 1922, includes every type of Egyptian jewel, with unbelievably sumptuous decoration.

AMULETS

These small magical charms, such as girls today wear on bracelets, had a religious or magical meaning.

Amulets or charms might be of semi-precious stones, like carnelian or lapis lazuli. Sometimes solid gold was used, but most often they were of blue, green, gray, or tan faïence, glazed. They were frequently made in the shapes of principal god-emblems. An instructive group of amulet figures is collected in the University Museum at Philadelphia, where we can "translate" miniature birds, bulls, cats, dogs, jackals, fish, crocodiles, cows, falcons, lions, and lizards into their proper deities. The jackal, for example, stood for Anubis, a god protecting the dead. The bull was the deity Apis, worshiped at Memphis with high honors and buried in state in the Serapeum at Saqqarah. Bes, combining lion and man, presided over birth, sleep, and one's personal toilet. The horned cow, with a solar disc between its horns, is identified with Hathor, goddess of love, music, and dancing. Hathor was prominent in the Tut-ankh-amun treasures. The falcon's head belonged to Horus, god of Edfu. The lion's head denotes Sekhmet, a chief deity of Memphis, together with Ptah. A falcon's head, topped by a sun-disc, is the symbol of Ra, sun-god of Heliopolis, which is a modern airport of new Egypt. An ibis stands for Thoth, god of sciences, and a hippopotamus presides over births. A cat-headed amulet portrays the goddess Bubastis. For illustrations of Egyptian gods, see 239, 240.

People had collections of amulets which they wore on all occasions in life. In death their mummies were covered with nets of blue, green, and gray faïence "mummy beads." These slim tubular beads alternate with amulets of the above sort, as a rosary alternates its various sizes of beads.

ANKLETS AND BRACELETS

The entire history of Egyptian jewels could be traced through bracelets and tinkling anklets which often went in matching ensembles. The earliest jewel-making Badarian Egyptians made shell, pebble, ivory, beads, or bone bracelets. Sometimes bracelets were heavy solid bands of ungemmed gold or two half-circles hinged together like doors (a type still preferred in old Mediterranean countries). Again they were of leather, or of resin or alabaster. Often they were trimmed with plaques of crocodile skin. Some used by the Tut-ankh-amun court were of rows of gold, carnelian, and lapis beads alternating with medallions of gold or carved lapis. Flexible types were composed of beads of electrum, lapis, pale carnelian, and green glass with a large lapis scarab bearing the king's cartouche or seal. Two remarkable sets of silver bracelets from Queen Hetepheres' jewel casket are in the Museum of Fine Arts in Boston today. They have recessed designs of silver dragonflies and are of graduated diameters, to fit the swell of the arm above the wrist or of the leg above the ankle.

COLLARS

The broad collar, known as the *usek*, was one of the most unique contributions of Egyptian art. As early as the Old Kingdom (2800-2250 B.C.) it was worn in the elegant simplicity of faïence beads, with anklets and bracelets to match.

The broad, flat *usek* of the Eighteenth Dynasty was one of the most unique contributions of Egyptian art jewelry. It was generally made of stones alternating with rows of faïence beads. It had insets of scarabs (see below) and a golden clasp, of falcon heads, for example. The rows of faïence beads in such collars of this golden period were made to imitate actual

dates, flowers, or leaves distributed to guests, together with faience rings, at happy banquets.

The usek was always part of the formal dress of a pharaoh and was worn by him in his grave. In fact, his mummy case usually had a gilt and enamel usek about the throat of the painted image of the deceased.

We have marveled in Cairo at a set of five of Tut-ankh-amun's collars. One was cut out of a sheet of solid gold. Others were flexible, made up of as many as 250 small plaques of gold; their tiny cloisons were filled in with gay-colored glass, the whole developing a curved-wing vulture motif. One of the five usek collars was so heavy with gems that the artist attached a bronze pendant to hang down the pharaoh's back and counterbalance the weight of his glory. To top off his artistry, he stamped on the reverse, directions as to correct assembling of the rows of gleaming beads. Was this an intuitive preparation for the days more than thirty-four centuries later, when a Howard Carter would stumble on these very gems and assemble them for a young, new Egyptian Museum?

Another type of Eighteenth Dynasty necklace, the *menyet*, was made up of many strands of beads with a counterpoise bronze handle, enabling it to be shaken as a rattle in ceremonials or worn with the metal pendant hanging down the back.

DIADEMS

Egyptians gave much attention to their heads, both in life and in art portrayals. They wore heavy wigs studded with carnelian rosettes and then decked these with golden head-caps, even as they attached golden beads to the mummy cases of their pharaohs.

Sometimes the diadem was a fragile gold fillet. Again, it was a simple band of gold, decorated with carnelian-inlaid gold rosettes. That of Tut-ankh-amun (illus. 154) has in front the emblems of upper and lower Egypt, the vulture and the cobra. Its clasp at the back is a rosette of lotus-shaped flowers, from which two ribbons of gold, similarly decorated, hung

down the monarch's back, as he slept in the Valley of the Kings.

The chief headdress of the young king, on his solid gold mask, was a "simple" Egyptian head-cloth marvelously adorned with alternating stripes of blue glass and gold and trimmed over the forehead with falcon and cobra (illus. 154).

PECTORALS

In the jeweled breastplates worn by the priests of Israel, we can see an influence from the earlier Egyptian jeweled pectoral amulets and breastplates of gold, amethyst, lapis, garnet, carnelian, mother-of-pearl. These ornaments were intended not only to adorn their wearers but also to give them magic guarantee against evils in this world and the world to come; for pectorals were placed on mummies in their wooden cases. Mummy breastplates from the Early Empire are owned by the British Museum.

In illustration 149 we see a famous pectoral. This gift to Princess Hat-Hor Yunct from her father, King Se'en-Wosret II, was found near the King's pyramid at el-Lahun. It dates from c.1887-1849 B.C., soon after Abraham may have left his home at Ur for Canaan. Note the two well-executed falcons, symbolizing the god Horus, looking intelligently at each other across the beetle cartouche, or seal of the king. Right and left of this scarab are ankhs, or keys of life, which became the anticipatory tau or T-shaped cross of early Christians. Note the sun-discs of the god Ra, above the falcons' heads and the delicate little seated figure, suggesting immortality. This pectoral is a great gem, worked out in fragments of turquoise, lapis lazuli, carnelian (the triumvirate of ancient gems in middle eastern art), and garnet, inlaid on gold. The pectoral hangs from a chain of graceful beads of similar materials.

RINGS

Rings were plentiful for fingers and ears and carried the same emblems made of the same materials as the necklaces and other ornaments. One triplet ring of Tut-ankh-amun, in fashion not unlike the crude "bedouin engagement rings" of present Pales-

tine. was a triple band, surmounted with two scarabs of gold and one of lapis.

Scarab rings, one of which Joseph no doubt owned, were the most numerous, with seal stones mounted in gold swivel settings or, in the New Kingdom (1580-1085 B.C.), carved in solid metal, like the Roman seal rings which are still engraved with initials of moderns.

SCARABS

Together with amulets, scarabs were one of the most distinctive contributions of Egyptian jewelers. Nilotic peoples saw the sun roll like a great ball through the heavens and then looked at dung balls in their fields in which earthy beetles placed their eggs. They said that the sun-god Ra, who at dawn was Khepera, at noon took the form of a beetle. Gradually they made the sacred beetle an emblem of eternal life. They mummified some, and they fashioned myriads of beetles from steatite faience, crystalline limestone, or semiprecious stones, glazing them and affixing to their flat side the cartouche of the owner or of the reigning pharaoh.

Thus scarabs, whether set in seal rings with a swivel type of bezel rim (illus. 150), or mounted in Roman fixed fashion, or used to stud pectorals, crowns, or bracelets, have enabled archaeologists to date materials found in conjunction with them in tombs or city ruins.

Every king of Egypt had his own scarab cartouche, or seal. Often he had two, one giving his throne name and the other his name before ascending the throne. Cartouches of the principal pharaohs have been identified, and when these now come to light in layers of ancient cities or in tombs, they establish dates of material surrounding them. The deity forming part of the royal name is given first place in the design, as the sun-disc in the case of Cheops, builder of the First Pyramid. Kings who ruled over upper and lower Egypt had on their scarabs the papyrus stalk and the lotus. The seal of Tuthmosis III bears a sun-disc, a "comb," and a beetle of immortality.

Heart scarabs, 3 or 4 in. long, were laid over the place from which the human heart had been removed in process of

mummification; or at the throat, to carry a spell imploring the heart of the deceased not to bear witness against him when his actions were being weighed in the scale of Osiris, judge of the dead. Sometimes the heart scarab was part of a pectoral and was engraved with a quotation from Chapter 5 of the Egyptian Book of the Dead, of which many papyrus manuscripts have come down to us.

Toward the end of the Eighteenth Dynasty huge heart scarabs were made, commemorating secular events. The great lion-slaying stunt of Amenhotep III is depicted on his huge scarab found at Lachish, the border fortress in southern Palestine. The Palestine Archaeological Museum has a notable group of Egyptian scarabs.

TREASURE BOXES AND COSMETIC CASES

Jewel boxes to contain a queen's treasures were themselves gleaming gems of inlaid ivory, ebony, and precious woods, covered, like Queen Tiy's in the Egyptian Museum, with deep-blue glazed faience decorated with gold. Every golden coffin of a pharaoh recovered from a hill-tomb or pyramid is a jewel box of treasures.

Cosmetic cases, of carved shell or enamel inlay work, with lids of gold, contained the kohl applicators, gold hairpins, needles, ivory "pocket combs" and ointment spoons essential to every Egyptian dressing table.

Egyptian jewelry in the time of Christ, Paul and Mark, who founded the Egyptian Coptic Christian Church, was of Greek flavor. Matching necklaces, girdles, and bracelets were of gold chain alternating with solid-gold medallions. These bore portraits like those on fine Greek coins.

THE JEWELER'S STUDIO

The craftsman-artist was given an important place in the royal studios of Egypt. He had full equipment of drills, operated with a distinctive bow-shaped device to keep them rotating; and of metals and gems and ivories for his inlay work. He proceeded in collaboration with carpenters. He was a popular figure because he not only made the collars, bracelets, and rings coveted in life but supplied the sacred

amulets by which people sought to keep contact with their many gods. With crude stones, he beat gold, paper-thin.

GREEK JEWELRY

RELATION TO APPAREL

The perfection attained by Greek sculptors of the fifth century B.C. in delineating the charm of the human form prevented them from adorning their marble gods with jewelry. This would indeed have been to gild the lily. The garments of a Diana of the Hunt or a Winged Victory seem to float by sheer grace, without need of fibulae to fasten them to the wearer. But in actual life, women of the Greek state regaled themselves in elaborate gold necklaces, with tiny pendant vases, and in earrings too heavy for ear-comfort. We have walked up and down in ancient Athens near the vanished stalls of pre-Christian jewelers and have imagined them busily turning out gold fibulae to hold the shoulder folds of gracious Grecian draperies, or paper-thin gold strips to ornament the bottom of their gossamer chitons, or golden chains and rosettes to indicate the aristocratic station of officers' wives.

In lacelike filigree gold work the ancient Greeks, like moderns, excelled. Even today in prewar peasant villages, the women invested returns from their year's work at the embroidery stool in bracelets and necklaces brought through the countryside by peddlers. These they gaily wore in village folk dances when the whole Greek state put on national festivals in the stadium, each community vying in joyful pagantry and dances with its neighboring town.

Some of the wealth which had been spent by Greeks of the fifth century B.C. for temples began in the next century to flow into pockets of wealthy citizens. They bought luxury gifts in the gold coming then from Egypt, southern Russia, Asia Minor, and Italy, making life less austere for the beauty-loving Hellenic people.

Greek intaglio gem-stones of chalcedony, yellow jasper, carnelian, and rock crystal

were carved with youths and maidens and with mythical heroes. Superb gold and silver Greek coins (illus. 90) bear portraits of rulers. In the Hellenistic period (323-30 B.C.) the intaglio became the cameo gem; its design stood up, as if embossed rather than incised in the stone for sealing purposes. (See the Evans and Beatty Collection of Gems, Metropolitan Museum of Art). Cameos were purely ornamental gems. No jewelers ever excelled stones incised by early Mesopotamians.

Greek bracelets of rock crystal, were made in the fourth century B.C.

Granules of applied gold were very skillfully fashioned by Etruscan jewelers of Italy in sixth and fifth centuries B.C. They were copied by Greeks in colonies of southern Italy, and are again by near eastern jewelers of today (illus. 157). A pin in the authors' collection, studded with lapis, looks like the Etruscan discs from the fifth century B.C.

GREEK AEGEAN ART

Jewelry excavated in Crete includes fine gold necklaces whose carved lotus leaves, alternating with barrel-shaped beads, show clear Egyptian influence. Fine cylinder-scalars or signets were placed around many a Cretan's neck at burial. Finger rings seem rare and when found are of precious metals. Early Minoan II gold work (c.2600-2400 B.C.) reminds us of the thin gold leaves and petaled flowerets we have seen in the Sumerian collection from Ur of the same period. Late Minoan necklaces found in Crete are characterized by melon-shaped beads, alternating with thin metal roundels and beads. Similar necklaces we have recently bought in Armenian shops at Jerusalem. Near eastern craftsmen still cling to designs of their ancient predecessors.

PHILISTINE JEWEL-CRAFT

We know little of jewelry among the neighbors of Hebrews along the Mediterranean coastal strip. But the Bible tells of gold jewels which these Philistines were compelled by the Hebrews under David to fashion in expiation for stealing the ark (I Sam. 6:17, 18). These took the

extraordinary form of five golden tumors and five gold mice (one for each of the five great Philistine towns,—Ashdod, Gaza, Ashkelon, Gath, and Ekron). They visualized Jehovah's affliction of abscesses and rodents sent to beset the Philistines after they had placed Jehovah's treasure in their House of Dagon at Ashdod.

PHOENICIAN GEMS

The widely traveled Phoenician merchants plying from Byblos, Tyre, and Sidon had every opportunity to buy and copy jewelry produced by nations bordering the Mediterranean. Not especially creative themselves, but rather craftsmen and traders, Phoenicians, nevertheless, knew the tricks of blending, copying, and promoting what others fashioned. Their galleys were crammed with art-products of the ancient Near East, which peoples to the west sought in exchange for their wines, grapes, and grains. Phoenicians used their profits to found colonies and extend their maritime empire.

In a safe within the National Museum of Lebanon in Beirut we have seen gleaming objects of gold found in the Royal Tombs at Byblos, the coastal city from which our word "Bible" is derived. We were thrilled with their beauty, as we looked at the well-labeled *objets d'art* presented to kings of Byblos by rich Amenemhet III of Egypt in return for some piece of co-operative loot or merchandising on the Mediterranean. The treasures of forty centuries ago include bracelets of solid gold, with gate-clasps like our own bought that same day in a Beirut bazaar; pendants of enamel on solid gold; sandals with silver soles; scarabs on thin yellow-gold bracelets; scarf pins of gold; the gold-trimmed scepter of the king of Byblos; amethyst scarab rings; a charming golden cup of carved papyrus leaves; and an array of fantastic little gold and faience statuettes, of hippopotamuses, porcupines, lions, naked women, and monkeys playing musical instruments with a humorous piquance. These objects show definite Egyptian influence.

A Byblos bracelet is seen in illustration 151.

As indicated in the effective booklet by

Charles Corm, prepared for the Pavilion of the Republic of Lebanon at the World's Fair of 1938-39 in New York, some critics state that indigenous Phoenician art never existed. But Corm indicated archaeological proof of the art of the Phoenician ancestors of the Lebanese. "Placed in the center of the first human civilization," he writes, "between the prosperous Nile and Euphrates valleys, Phoenicia was the pivot of the relations which cemented antiquity." He claims that many a Greek capital, Ionic motif, Assyrian emblem, and Etruscan construction proceeded directly from an older Phoenician concept.

Coming to gold art, Corm quotes Mme. Dunand, collaborator with her famous archaeologist-husband in Lebanon, as exclaiming, "What an extraordinary skill they had! Phoenicians worked in gold, iron, and bronze as if they were angels. In gold, above all! The joyful discoveries at Byblos are the most beautiful in the world." She calls the filigree of the Phoenicians, with its unbelievable delicacy, a prodigy. Similar filigree jewels have been found elsewhere, she says, but never their equals. Dunand calls attention to the marvelous ivories in the Aleppo Museum. He believes that no people, Hittite, Assyrian, Greek, or Egyptian, achieved so high a degree of perfection in unique design as Phoenicians. Phoenician ivories from the nineteenth century B.C. are noble artistry, indeed. Enthusiasts for Phoenician art remind us that ancestors of Athens and of Rome were still in the Bronze Age while these eastern sea folks were turning out gems and writing records in an alphabet for which the whole world is their debtor.

The gold filigree shown by drawings in Corm's booklet show pendants with perched birds, miniature vases, earrings with stylized palm leaves, and bracelets of solid hoops of thick gold ending in two lions' heads.

ROMAN JEWELRY

The more austere tastes of law-loving, martial Romans were by Paul's time superseded by corrupt, luxurious displays of heavy gold bracelets, rings, and necklaces. Julius Caesar had six hobby collections of jewelry displayed in the Forum Temple of

Venus Genetrix. Yet at certain periods reformers banned all jewelry save, for example, a ring suitable to the man's station in life—of gold, silver, or iron. The Roman setting, with embedded ruby or carnelian or an emerald brought from Cleopatra's mines in North Africa, is one of their permanent contributions. Sometimes the gold was so soft that the ring crushed when a man's hand received a hearty shake.

Women of Rome lacked the good taste of their Greek neighbors. Statues of seated Roman matrons are decked in heavy gold coronets behind a mass of ringlets, with their ears and neck adorned by gold beads. Bracelets to match the necklace were worn. Sometimes these were the gate-hinged type seen in Egypt and Palestine today. Sometimes they were trimmed with Red

Sea pearls or jasper carved with cupids. "Covered with jewels" described first-century courtesans whom Paul denounced.

Pompeii in the time of Paul glittered with wealth purchased by rich provincial merchants. Banquets which entertained an emperor and his wife and were appointed with fine silver table service indicate lavish standards of living in the first century A.D.

The amenities of life in ancient Bible lands included even eyeglasses. At least, lens-shaped pieces of quartz from c. 300 B.C. were found by Schlicmann. Biconvex pieces of glass have been found in ruins of Rome of the third century B.C., although these may have been pendants rather than eyeglass lenses. Ancients knew how to magnify through glass globes containing water.

ADDITIONAL BIBLE REFERENCES

"and weighed unto them . . . twenty bowls of gold" (Ezra 8:27)

"though Coniah the son of Jehoiakim king of Judah were the signet upon my right hand, yet would I pluck thee thence" (Jer. 22:24)

"Thou settest a crown of fine gold on his head" (Ps. 21:3)

"Such as lavish gold out of the bag, and weigh silver in the balance, they hire a goldsmith, and he maketh it a god; and they fall down, yea, they worship" (Isa. 46:6)

"I will give him a white stone, and upon the stone a new name written, which no one knoweth but he that receiveth it" (Rev. 2:17) Could this be a reference to a cylinder-seal?

BIBLIOGRAPHY

American Schools of Oriental Research, *Bulletin*, February, 1935, New Haven.

———, *Biblical Archaeologist*, New Haven.

Amason, H. H., "The Antioch Chalice," *Biblical Archaeologist*, December, 1941, American Schools of Oriental Research, New Haven.

Breasted, James H., *Ancient Times*, Ginn and Company, New York.

British Museum, *Guide to the Babylonian and Egyptian Antiquities*, London.

Corn, Charles, *L'Art Phœnicien*, Beirut.

Crowfoot, John and Grace M., *Early Ivories from Samaria*, Palestine Exploration Fund, London. Egyptian Museum, Catalogue, Cairo.

Frankfort, Henri, *Archaeology and the Sumerian Problem*, University of Chicago Press, Chicago.

Gordon, Cyrus H., *The Living Past*, The John Day Company, New York.

Hall, H. R., *Aegean Archaeology*, G. P. Putnam's Sons, New York.

Hastings, James, *Dictionary of the Bible*, Vol. 4, Charles Scribner's Sons, New York.

Legrain, Leon, "The Boudoir of Queen Shub-ad," *Museum Journal*, September and December, 1929, pp. 211-245, University of Pennsylvania, Philadelphia.

———, "Gem Cutters in Ancient Ur," *Museum Journal*, Vol. 20, No. 3, 4, University of Pennsylvania, Philadelphia.

- Metropolitan Museum of Art, *A Picture Book of Greek and Etruscan Jewelry*, New York.
- . *A Picture Book of Egyptian Jewelry*, New York.
- . *Bulletin*, Vol. 28:6, June, 1933, p. 114, New York.
- Neuburger, Albert, *The Technical Arts of the Ancients*, Methuen & Co., Ltd., London.
- Pendlebury, J. D. S., *Handbook to the Palace of Minos at Knossos*, Macmillan & Company, Ltd., London.
- Petrie, Sir Flinders, *The Making of Egypt*, The Sheldon Press, London.
- Rogers, Frances, *Five Thousand Years of Gems and Jewelry*, Frederick A. Stokes Company, Inc., New York.
- Rowe, Alan, *Catalogue of Egyptian Scarabs in the Palestine Archaeological Museum*, Imprimerie de L'Institut Français d'Archaeologie Oriental, Cairo, for Palestine government.
- Steindorff, George, and Seele, Keith, *When Egypt Ruled the East*, University of Chicago Press, Chicago.
- University of Pennsylvania, *The Royal Tombs at Ur*, Philadelphia.
- Weigall, Arthur, *The Life and Times of Akhnaton*, T. Thornton Butterworth, Ltd., London.
- Woolley, Sir Leonard, Abraham, Faber & Faber, Ltd., London.
- , *The Development of Sumerian Art*, Charles Scribner's Sons, New York.
- , *Ur of the Chaldees*, Charles Scribner's Sons, New York.

MUSICAL INSTRUMENTS

Praise ye Jehovah . . . with trumpet . . . with psaltery and harp . . . with stringed instruments and pipe . . . with high sounding cymbals.

—Ps. 150:1-6

Introduction

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INTRODUCTION

UNIVERSAL CRAVING FOR MUSIC

As we have watched lonely shepherds in the highlands of Judaea, Syria, and Greece piping on their homemade instruments (illus. 173), we have understood the companionship derived through the ages in ancient Bible lands from these crude devices. These not only have served to give familiar calls to sheep but have satisfied the shepherds' hunger for rhythm and for sounds other than their own voices over the rocks and grasslands. The isolation of a spiritual shepherd like David, with his lyre, fruited in such music of worship as has seldom been excelled. The angels praising God at the Bethlehem birth of Jesus carried on the "musical tradition" among shepherds enriched by the son of Jesse.

Rhythm is built into the physical structure of every one of us through the timing

of pulse-beats, and into the foundations of the whirling planets with their mathematical precision. So we are not surprised to see primitive people of the ancient East carrying musical instruments at an early date. By the remarkable skill of archaeologists we are able to look at lyres played 5,000 years ago in Sumerian Ur, home city of Abraham the Patriarch at the head of the tidal swamps of the Euphrates north of the Persian Gulf. Sumerian, Babylonian, Hebrew, Syrian, Egyptian, and Greek shared all the most important musical instruments. As models improved, these passed rapidly to neighboring lands by means of wandering minstrels and merchants. The double pipes of Syria (illus. 173) became native to Cyprus and other islands of the Mediterranean. The stringed harps and lyres of Sumer became so naturalized in biblical Palestine that the lyre became a favorite instrument among Hebrews. The Assyrian harp, steadied by a belt as its player walked along strum-

ming, may have been the inspiration of the still taller Egyptian great harp, to which the player stood (see p. 294). Invaders commandeered musicians from among their captive nations. Sennacherib did so with musical Hebrews, for his warlike Assyrians were little gifted in the gentle art of music. Musicians were honored and were even spared the death penalty suffered by their brothers. Throughout Bible history, the men who furnished the orchestras and choruses for worship stood next to the kings and priests in prestige. They were well fed and well compensated. A famous school for musicians was maintained at Egyptian Thebes, where only those were eligible whose families passed on their profession from father to son. To the flute school of Alexandria, sons of rich Greeks fared. Canaanites, to whom Koshat was the patron of music, had schools of psalmists. Of the guilds of Temple musicians and the school of sacred music established by David at Jerusalem, we shall speak later. When David the shepherd-musician became David the King and musical director of Israel, music among the Hebrews acquired a prestige unsurpassed even when the Roman Emperor Nero in Paul's time strove for attention by way of his lyre, not his fiddle.

MUSICAL INSTRUMENTS FROM SUMERIAN UR

THE ROYAL STRINGS

In the Museum of the University of Pennsylvania we have marveled at the artistic beauty of the gold and mosaic lyre (or harp, as some prefer to call it), found in the great death pit of Ur by Sir Leonard Woolley and his expedition. This is one of four remarkable stringed instruments found there and subsequently shared with the British Museum and the Baghdad Museum. The "gold lyre," companion to a "silver lyre," is distinguished by a golden bull's head at the top front of the sound box which would be a credit to the greatest goldsmith's studio in any age. Bearded with square pieces of lapis lazuli, and with eyes of shell and lapis, the lifelike face of the bull gives a hint of jewelers' skill rivaling that of the men who made the golden

cups of Ur and those of Cretan Knossos. Fellow-artists of the goldsmith who molded this head c.3000 B.C. inlaid the two uprights with gay bits of red limestone, white shell, and blue lapis. A conventional design of inlay outlines the sound box. And a remarkable panel at the edge of the lyre just under the golden bull's head shows a lively animal orchestra (illus. 174) and depicts scenes from the adventures of the Sumerian hunter-hero, Gilgamesh. One detail shows an ass playing a lyre with his two feet, singing as he plays, while a bear helps him steady the instrument. A seated jackal shakes a sistrum—an instrument whose rattling tickled the ears of Egyptian worshipers of Hathor 1,500 years later—and plays what looks like the ancestor of the rectangular psaltery. This amazing lyre, probably from the grave of Queen Shub-ad's husband, is akin to the silver lyre having a silver cow's head at the front of the sounding box, and to another silver one with a stag, and a fourth with copper stags. Woolley wonders whether the finding in one grave of four lyres, with the heads of these various animals, may shed light on the ancient Sumerians' system of harmony. Does the deep-bellowing bull denote bass; the cow, tenor; the stag, alto? Sumerians associated the bull with deity and had a profound love of all animals. The lyre, distinguished from the harp by a bridge to which the strings are attached, is characteristic of Semitic peoples, in old Babylonia, Syria, Phoenicia, Arabia, and Palestine. It was not at all the child of Asia Minor or eastern Asia. Characteristic, too, of ancient Sumer is the bow-shaped or triangular harp, one of which, with eleven gold knobs on its string-post, was actually found in the hands of little Queen Shub-ad who was buried in the Royal Cemetery of Ur before the third millennium B.C. Tissot, the French artist, shows David seated before Saul, playing a harp or lyre of this bow-shaped variety. But we believe that David's was the more portable kind which he carried conveniently as he walked.

OTHER MUSICAL INSTRUMENTS OF SUMER

Other musical instruments of Sumer, delightfully presented in *The Music of the*

Sumerians, and Their Immediate Successors, the Babylonians and Assyrians, by Francis W. Galpin, include such wind instruments as the reed flutes of this marshy land, flutes which filled temple courts with joy 1,000 years before Abraham was born at Ur. This flute was held vertically and was blown across an open end. It long antedated the Greek pipes of Pan, or syrinx. The ancient vertical pipe, held thus to avoid collision with passers-by, is still used in Syria, where we one day came across a shepherd whiling away his long hours with the pipe seen in illustration 173. From Sumerian seal impressions and other evidence, we know that these clever Mesopotamians also made flutes of copper and double-reed pipes, later prevalent all over the Mediterranean, and short silver pipes, like the one found at Ur from 2800 B.C. When these all blended to play the accompaniment to the great Sumerian Hymn on the Creation of Man or ascended the impressive ramp of the ziggurat, hearts were stirred with emotion. Galpin has written what he believes to have been the general notation and words of this great song and its harp accompaniment, which brought praise in the third millennium before Christ to the mother-goddess Inanna and the gods Enlil, An, Utu, and Enki.

Sumerians used, also, percussion instruments—various sorts of drums, such as the great *balag*, played with both hands, and an hourglass drum made of half-gourds, human skulls, or logs, over which skins were drawn taut. The smaller drum, called by Galpin the *balag-di*, accompanied singers. Goblet-shaped drums of clay or wood were also in vogue, and some, too, of metal. Sistra, other jingling rattles, and clanging cymbals accompanied the gentler harps and lyres.

Like later Mediterranean people, the Sumerians blew on horns of real animals, if we judge by a cylinder-seal of Gudea of Lagash, about 2400 B.C. The conch-shell in Babylonia came later.

Not all the music of Sumerians was sacred. A tiny lapis-lazuli cylinder-seal which belonged to Queen Shub-ad and which is now in the Museum of the University of Pennsylvania shows a musician standing at his bow-shaped harp playing to royal banquet guests. The listeners are

seated on square stools, receiving wine and food, as they are fanned by slaves. And a peerless picture of banquet music before c.3000 B.C. appears on the famous mosaic Royal Standards from Ur. Seated fleeced guests are being served, while a musician strolls in, strumming his bull-headed lyre for a woman singer.

Is it too fanciful to imagine that some of the great veins of ability in the line of sacred music which flowered among the Hebrews under David and Solomon came to them by way of the Patriarch Abraham? Could not the Friend of God, before he had left the culture of the great musicians at Ur to trek to Canaan, have heard some of their renditions of notable religious song with orchestral accompaniment? Perhaps Abraham had imbibed the Sumerian tradition about the mission of music, written on the clay cylinder-seal of a king-priest who resided at Lagash near Ur, at the center of the "Plain between the Rivers," almost thirty centuries before Christ. As Galpin quotes it, "the purpose of music is to dispel the gloom of the sordid city; to ornament the royal court and sacred temple with joyful music; to still the disturbed hearts of men; restrain their lurid passions; and wipe the eyes of those who sorrow." No better definition has yet been given of the function of religious music. Sumerians were so devoted to this art that, as Curt Sachs says, shepherds living about 2600 B.C. near Lagash were given a state subsidy to improve, for temple service, natural talents they had cultivated while guarding their sheep in lonely pastures.

The orchestra of Nebuchadnezzar performed on the Plain of Dura in front of the giant image of gold. (Was it, we wonder, an image of the king himself, set up after the manner of Roman emperors later?) The instruments are listed by the author of the Book of Daniel (3:7). However, as Galpin clearly points out, this orchestra of the Babylonian monarch (sixth century B.C.) was Graeco-Syrian in its composition: "cornet, flute, harp, sackbut, psaltery, dulcimer and all kinds of music." The late date of Daniel (c.175-164 B.C.) as a piece of symbolic prophetic writing is suggested by this orchestral anachronism.

Hebrews used practically the same in-

LANDMARKS OF JESUS

This section of eight pages portrays those places central in the life of Jesus.

158. "Jesus was born in Bethlehem of Judaea" (Matt. 2:1). A cave beneath the choir of the Church of the Nativity, begun by order of Emperor Constantine in the fourth century A.D., is the traditional site of the birth of Jesus. As early as the second century Justin Martyr mentioned "the manger in the cave." The finger of natural sunlight is pointing to the Grotto of the Nativity beneath this best loved church in Christendom.

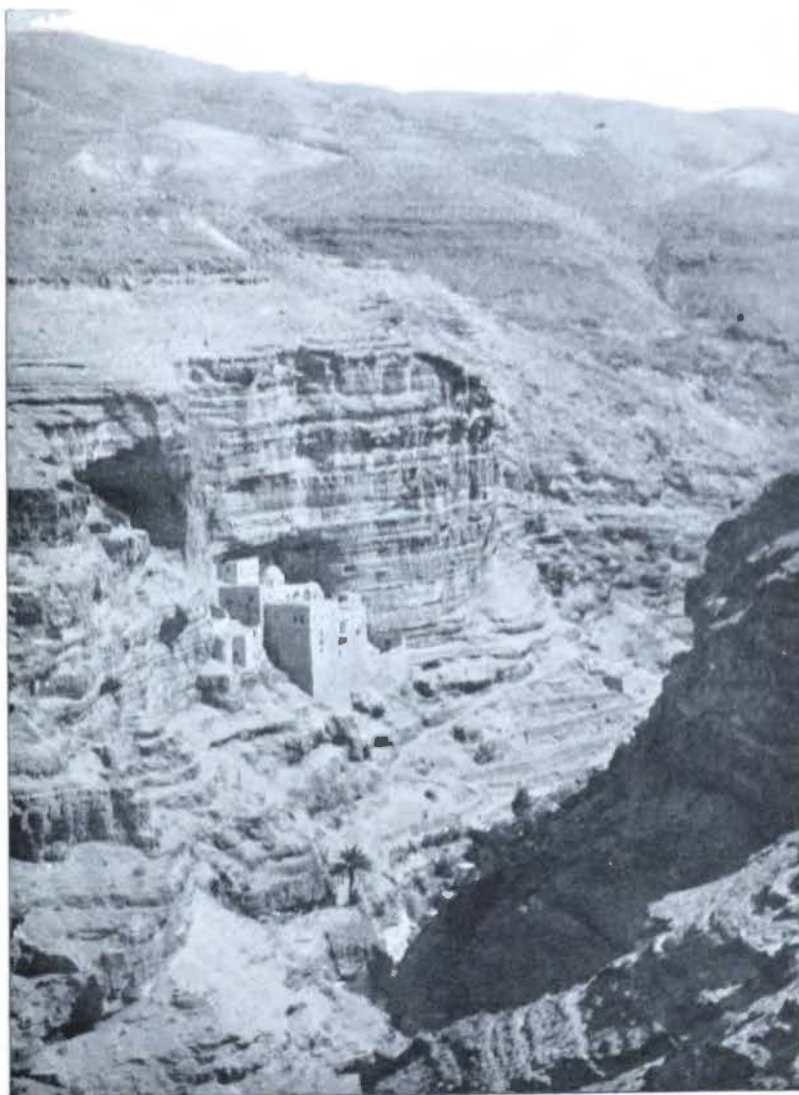


159. "Nazareth, where he had been brought up" (Luke 4:16).





160. "Jesus came from Nazareth of Galilee, and was baptized of John in the Jordan" (Mark 1:9).



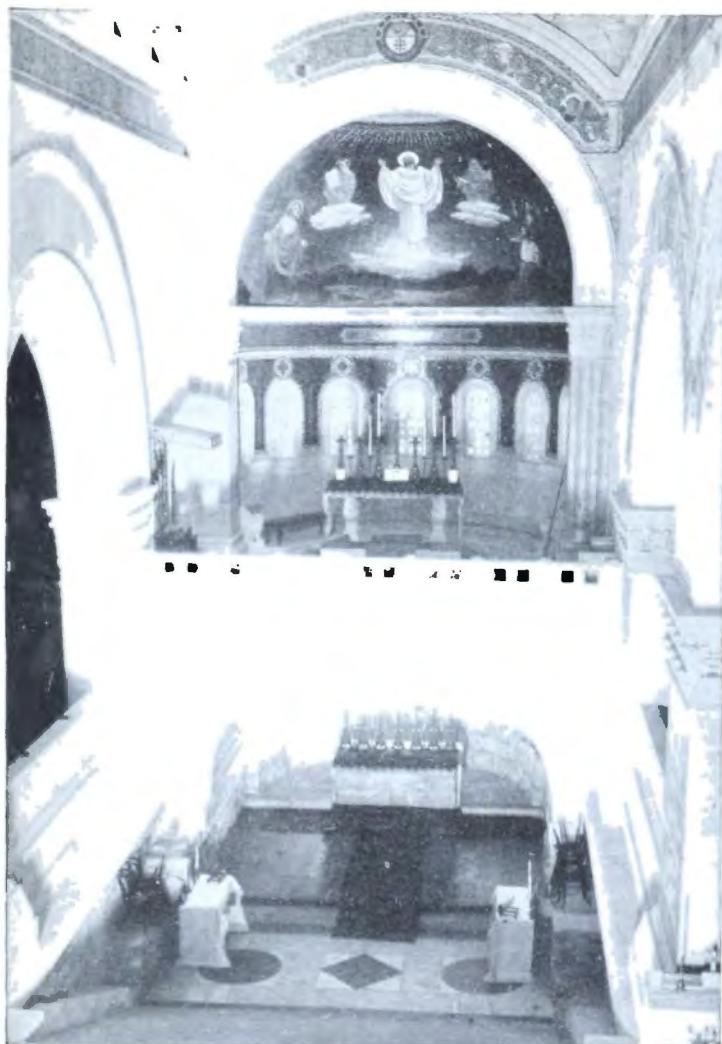
161. "Then was Jesus up of the Spirit into wilderness to be tempted" (Matt. 4:1). Looking from Jericho Road to the Orthodox Convent of St. George (Monastery of Elijah) in lonely Wadi el-Kelt.



162. "Walking by the Sea of Galilee, he saw two brethren" (Matt. 4:18). The Saviour's Walk still skirts the northwestern shore of Gennesaret, where Jesus recruited his first disciples.

163. "And thou, Capernaum, shalt thou be exalted unto heaven? thou shalt go down unto Hades: for if the mighty works had been done in Sodom which were done in thee, it would have remained until this day" (Matt. 11:23).

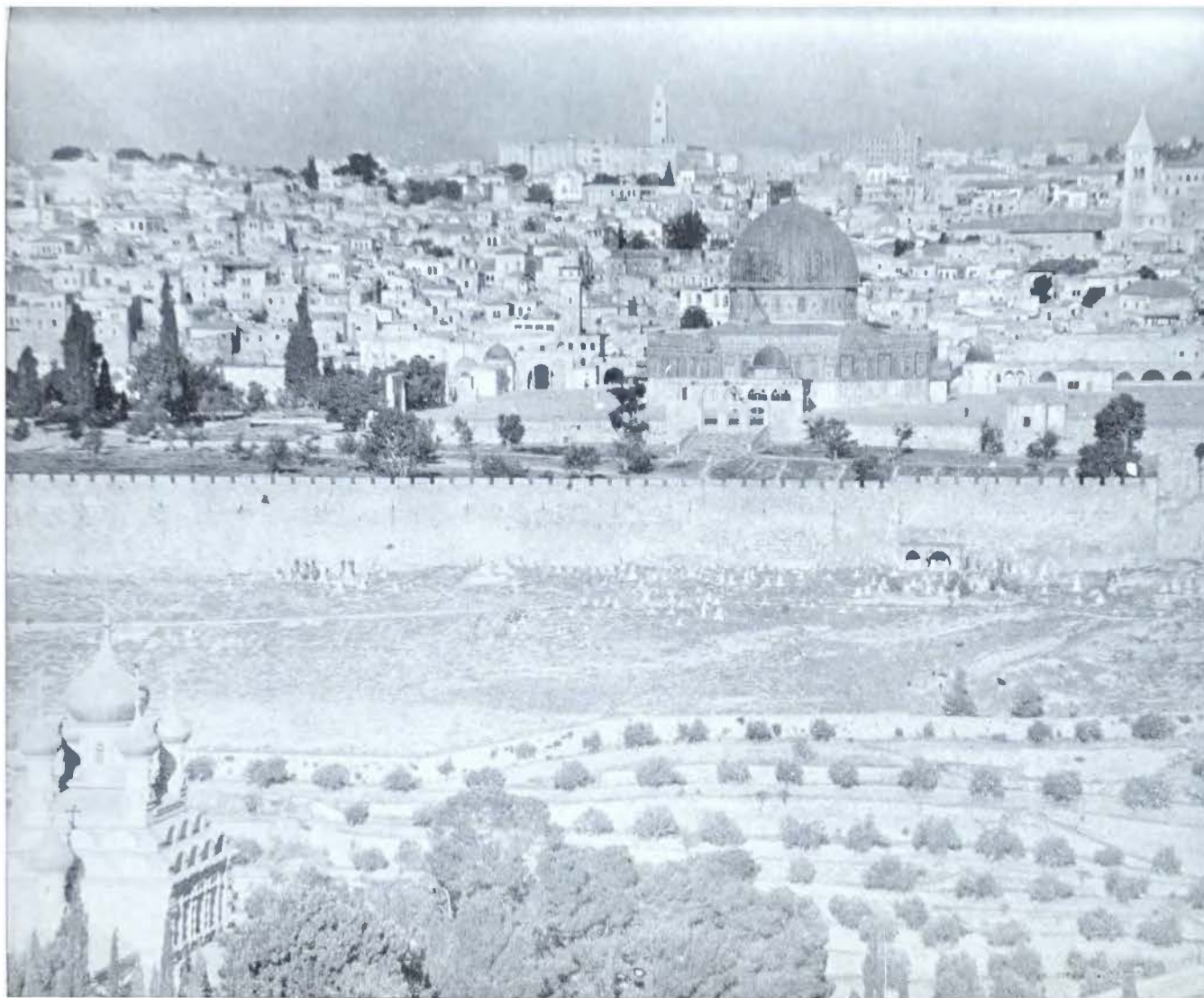




164. "And after six days Jesus taketh with him Peter and James, and John, and bringeth them up into a high mountain apart by themselves: and he was transfigured before them" (Mark 9:2). The beautiful Church of the Transfiguration on Mount Tabor, 1,700 ft. above the sea, may mark the site of the radiant experience in the life of Jesus.

165. "It being now eventide, he went out unto Bethany with the twelve" (Mark 11:11).





killeth the prophets, and stoneth
 them that are sent unto her! how
 often would I have gathered thy
 children together, even as a hen
 gathereth her chickens under her
 wings, and you would not" (Matt.
 23:37). The dramatic view from
 the Mount of Olives doubtless in-
 spired this apostrophe. The present
 eastern wall follows almost the same
 course as in Christ's day. At right
 is the Golden Gate, now blocked
 up. The Palm Sunday procession
 moved into the Temple Area from
 the Mount of Olives and the Kidron
 Valley, through its portals. The
 large structure to the right, the
 Dome of the Rock, dating from the
 end of the seventh century A.D. and
 sacred today to Moslems, occupies
 the site of Herod's Temple of Jesus'
 time. Just off the picture, right, is
 the Church of the Holy Sepulchre.
 Tower of German Church of the
 Redeemer. On the horizon is Jesus
 Tower of Jerusalem Y.M.C.A.
 Lower left, the domed Russian
 Church of Mary Magdalene.



167. "And he will . . . show you a large upper room furnished and ready" (Mark 14:15). Stairway to an upper room on Mount Zion, near the supposed site of the Last Supper.

168. "And when they had sung a hymn, they went out unto the Mount of Olives" (Mark 14:26). Bethphage on the upper slopes of the Mount of Olives was the starting point for the Palm Sunday procession which moved down the Mount of Olives, across the Kidron Valley, and up into the city of Jerusalem. On Holy Thursday, after observing the Passover and inaugurating the Holy Communion, Jesus and his disciples went out to the Mount of Olives, with its Garden of Gethsemane. Here his betrayal and arrest occurred. The Franciscans with their basilica at center, the Russians with their domed church at right, and the Armenians with garden on other side of road, all seek to conserve the sacredness of this olive-orchard landmark.





169. "They took Jesus therefore: and he went out, bearing the cross for himself" (John 19:17). The vaulted, medieval Via Dolorosa, along whose course from Pilate's Judgment Hall to Calvary tradition has located the episodes of Christ's journey to the cross. The road actually traversed by Jesus was at least 30 ft. below the present level.



170. "The place of a skull, which is called in Hebrew Golgotha: where they crucified him" (John 19:17, 18). "Gordon's Calvary" is not archaeologically proven to be the exact spot where Jesus was crucified. However, this cemetery hilltop near the Damascus Gate of Jerusalem has helped many to picture how Calvary looked.



171. "Now in the place where I was crucified there was a garden and in the garden a new tomb wherein was never man yet laid. There then . . . they laid Jesus" (John 19:42). Since the days of Constantine and the earlier investigations of his mother Helena, the Church of the Holy Sepulchre has been accepted by many scholars and millions of worshipers as the site of Christ's crucifixion, burial, and resurrection. Within this domed church with its twelfth-century Romanesque façade are numerous chapels, and rooftop sanctuaries, underground shrines, where Latin, Copts, Greek Orthodox, Armenians, Syrians, and Abyssinians, each with his own liturgy, seek to sanctify this landmark of Jesus.

struments developed by the Sumerians. Lyre, harp, flute, horn, trumpet, drum, and tabret were common property.

CANAANITE INFLUENCE ON HEBREW MUSIC

Critics can no longer date the beginning of Hebrew music for worship as late as the postexilic period. For, as Albright suggests, we now know, from clay tablets recovered from Ugarit (Ras Shamra) in northern Syria, that Canaanites (and their successors, the Phoenicians) exerted a definite influence not only upon the words of certain Hebrew Psalms but also upon music and the organization of guilds of temple musicians and singers. When we add the contribution of Phoenician architects and stonemasons to the actual Temple of Solomon at Jerusalem, the gift of the keen northern coast dwellers to their southern neighbors is great indeed. As Israel gradually conquered portions of Canaanite territory, she took over many of the cultural and religious ideas of her predecessors, even as Rome, in admiration, took unto herself the artistic grace and ideals of her eastern neighbor, Attica. The Roman Emperor Hadrian went so far as to wear Athena's image on his shield. Albright, in his *Archaeology and the Religion of Israel*, stresses emphatically the influence of the Canaanite hymns upon Jewish Psalms, even certain early ones. He attributes some sacred Hebrew music to pre-Israelite sources, though he agrees with scholars who accord David credit for giving Israel's sacred music its first real organization. Albright has put us in touch with Canaanite songs similar to Saul's Lament over Jonathan and the ancient Song of Deborah. The latter is one of the oldest portions of the Old Testament, and its verse form has tended to "freeze it" through all the ages when reformers made didactic alterations in other portions of the Old Testament. Albright calls attention to well-known Hebrew musical families which had Canaanite names as prefixes to their own. Greeks and Egyptians, as well as Hebrews, borrowed musical instruments and songs from the resourceful Phoenicians.

A clear picture of a Canaanite lyre used

about 1025 B.C. has been found on a vase from Megiddo, overlooking the Plain of Esdraelon near Nazareth. It puts us in touch with musical instruments of the time of Samuel, Saul, and David. It is about half as tall as the man who is playing it as he walks.

HEBREW MUSICAL INSTRUMENTS

Although the Jewish people excelled in music as in no other art and have continued to do so down to the days of Mendelssohn, Rubinstein, and Menuhin, they have left no unique musical instruments which archaeologists have been able to lay before us to compare with the golden lyres of the Sumerians or the long silver trumpets from the Tomb of Tut-ankhamun. Mosaic laws against depiction of men prevented their showing us in frieze, or on tablet or durable metal, how they played or what instruments they used. A few instruments appear on Jewish coins of the second century A.D. But we know that Hebrews shared their musical equipment with surrounding nations—nations which have left us pictorial representations of musical instruments. Harps, lyres, pipes, psalteries, horns, trumpets, and drums traveled from country to country in the Mediterranean world. Syria contributed the double pipe or oboe which we see in Cyprus (illus. 172). Pictures of kingly stringed instruments, fashioned before the curtain rose on history, have been found scratched on a pavement at Megiddo. One of these shows a woman playing a harp, 2,000 years before David. Northern Phrygia and Lydia contributed the flute and other instruments. C. C. McCown reports bone flutes from a Jericho cave of the Early Bronze Age. Jewish authors of the first sacred book, Genesis, paid tribute to the antiquity of their people's musical instruments by writing that Jubal, an early descendant of Cain, was "the father of all such as handle the harp and pipe" (Gen. 4:21). Albright believes that ancestors of the Hebrews had groups of traveling minstrels and metal-workers who went from one community to another playing and repairing as they went.

Although we have neither extant He-

brew musical instruments from antiquity nor notation of their scales or characteristic melodies, we do know the names of some of their favorite songs, as the Song of the Well, the Vintage Song, and the March of the Gittite Guard. And, of course, we have the actual words of their very early Song of Moses and Miriam, celebrating the triumph of God in delivering the Hebrews at the Red Sea from Egyptian pursuers (Ex. 15), and the Song of Deborah in Judg. 5, celebrating the victory of Israel's leaders over the mighty Jabin, King of the Canaanites. It is interesting to note that the latter poem contains this sweet allusion to music, although it was uttered as a chiding to Reuben:

Why satest thou among the sheepfolds,
To hear the pipings for the flocks?

The Lament Over Jonathan (II Sam. 1:17-27) is of great beauty.

Not all the music of the Hebrews was sacred. It contributed merriment to every wedding, village feast, house-roofing, sheep-shearing festival, and war enterprise, even if rendered on the crudest homemade instruments. David certainly made his own lyre and pipes. Amos, writing in the eighth century B.C., condemned the corrupt people of Samaria for singing idle songs to the sound of the viol and for "inventing" for themselves "instruments of music like David [David's]." By one of those weirdly corroborative incidents which travelers came upon today in Bible lands, we once saw, on this very hilltop of Samaria to which Amos referred, a harvest boy resting on the threshing-floor, playing his homemade "viol"—a skin stretched over a small box, with strings played by the ancient type of arched bow.

WIND INSTRUMENTS

Using cedarwood, sandalwood, leather, gut, reed, ivory, shell, gold, silver, and brass, early Israelites fashioned the instruments by which they praised God in their highest musical attainments. Music of worship culminated in the Psalms and the ritual of the Jerusalem Temple organized by David, elaborated under Solomon, and

revised after the return from the Exile "between the rivers."

TRUMPETS

Moses, in obedience to God's command in the wilderness, had his metal-workers fashion, of beaten or turned silver, two long trumpets to call the congregation to the tent of meeting and to give signals on the journeys from one camp to another. One trumpet call was to summon the princes commanding their groups. The first alarm meant that the camps pitched on the east should resume their journey; the second trumpet alarm was to rouse the campers on the south to fall in. Throughout the generations, "the sons of Aaron, the priests," continued to sound the unretreating worship call on the trumpets of Israel, reminding the people of Jehovah's deliverance from their enemies and resounding over the heads of the faithful "in the day of gladness, and in . . . set feasts, and in the beginning of . . . months . . . over burnt offerings, and over the sacrifices of peace offerings" (Num. 10:1-10).

There are many allusions in the Bible to the trumpet. When Jehovah spoke to the Children of Israel encamped at the base of Sinai, he instilled worshipful awe with "the voice of a trumpet exceeding loud" (Ex. 19:16). The very word "trumpet" is associated with the thought of jubilee, from Jubal, "father of all such as handle the harp and pipe." A trumpet proclaimed the fiftieth jubilee year to all of Israel and sounded a sabbatical year and the Day of Atonement (Lev. 25:8-11).

No instruments were so vital to the religious life of the Jews as these two silver trumpets which Moses fashioned, according to the Numbers record, at God's command. Little wonder that the designer of the Arch of Titus in the Roman Forum, wishing to depict the humiliation of the Jews in A.D. 70, shows the deportation of their trumpets along with their golden candlestick (illus. 59).

When Gideon the judge wanted to muster followers, he blew a trumpet to beat down the "children of the east" encamped in the Valley of Jezreel, within

sight of Nazareth. Saul on this trumpet proudly "blew about" the victory of his son, Jonathan, over the Philistine garrison. The trumpet was also used in battle to signal an army to stop fighting, as when Joab called his contingent to halt in their attack on Israel (II Sam. 2:28). Worship in the Temple, at new moon or major feasts, was heralded with the trumpet, followed by strains from the harp, psalter, and timbrel (Ps. 81:2, 3). We who have stood on the highland crags of Desert Tekoa in southern Judaea can see why Jeremiah ordered signals of warning to the people to be given by blowing the trumpet in Tekoa (Jer. 6:1). Ezekiel in the Babylonian Captivity knew the alarm sounded on a trumpet by the watchman. "Whosoever heareth the sound of the trumpet, and taketh not warning . . . his blood shall be upon him" (Ezek. 33:4, 5).

For generations the "sons of Aaron," priests, blew upon them, calling princes and tribes to worship. When Israel went into battle, trumpets sounded the alarm. When David brought the ark to Jerusalem after its fifty-year stay among the Horites of Kirjath-jearim, it came "with the sound of the trumpet" (II Sam. 6:15). When Absalom revolted, trumpets were blown from Dan to Beersheba. Trumpets inaugurated feasts, days of gladness, offerings of burnt sacrifice, and peace offerings.

Jesus made didactic use of the trumpet when he denounced Pharisees who sounded a trumpet before them, so to speak, by their words of self-praise in front of synagogues and on street corners (Matt. 6:2). Perhaps Jesus, attuned to the more spiritual worship of which he spoke to the woman at Samaria, had become surfeited with the blare of trumpets in the elaborate worship of his own people in the Jerusalem Temple and cried within himself for a quieter type of goodness expressed in a gift of a cup of cold water to the thirsty in His name.

Trumpets, as instruments of terror-striking warning, persisted through the last book of the Bible. John of Patmos, who had often heard the Roman trumpets of his own era sound shrilly, placed in the hands of his seven angels seven trumpets which they sounded with spectacular results in the whole world of nature—falling

stars, smitten sun, and a consumed earth (Rev. 8). When John's seventh angel blew the trumpet, great voices sounded from heaven: "The kingdom of the world is become the kingdom of our Lord, and of his Christ: and he shall reign forever and forever."

Julia Ward Howe made effective use of the trumpet in the lines of her "Battle Hymn of the Republic":

He hath sounded forth the trumpet
That shall never call retreat.

SHOFAR

The shofar, or ram's horn, is the oldest Hebrew instrument still in current use in Hebrew synagogues (illus. 175). The first one, made by flattening and straightening with heat the natural horn of a ram, may have been a tribute to that ancient ram sacrificed in the thicket when Abraham was about to offer his son Isaac to God on the altar.

Lady Hilda Petrie tells of a ram's horn found among vestiges of burnt offerings in a Jewish temple built in the Nile Delta under High Priest Onias about 154 B.C.

PIPE OR FLUTE

Probably the instrument of which most of us think first in connection with Bible customs is the simple reed flute, single or double, used by Syrian and Palestinian shepherds for 5,000 years. From Dan to Beersheba we have met them.

ISRAEL'S PERCUSSION INSTRUMENTS

In addition to trumpets, *timbrels*, or framed *hand-drums* (Hebrew *toph*), were used in the time of Moses to accompany the song and sacred dance of Miriam and her attendant women (Ex. 15:20) as they chanted antiphonally of how Jehovah had tossed into the sea, riders and horses of their Egyptian enemies. Before 3000 B.C., as we learn from a cylinder-seal of Queen Shub-ad, the eastern neighbors of the Hebrews were accompanying their psalms and enlivening their royal banquets with timbrels, or tambourines. Some of these had single heads and were rectangular; others were round, like the large timbrel carried

by a woman in stone at Nippur about 2000 B.C., now shown at the Museum of the University of Pennsylvania. (For picture, see Francis W. Galpin's *Music of the Sumerians*, plate 111.)

The loud-sounding cymbals of David's sacred orchestra accented the rhythm of Temple worship through the centuries (illus. 175). Josephus thinks these were flat, made of heavy bronze, which, when clashed together by the musical director, led the others. Some Assyrian carvings show cup-shaped cymbals with short handles. A few translators think the cymbals were castanets, but this seems unlikely.

DAVID'S PIPES AND STRINGED INSTRUMENTS

David was skillful with his *challil* (oboe). With this simple shepherd's reed pipe he summoned his sheep below Bethlehem to nibble closer to where he lay meditating on the wonders of Jehovah expressed in the Judaeon countryside. But he was especially talented with the lyre—probably not the harp, as the King James and Revised (I Sam. 16:23) versions translate it. Several lists of the instruments which David “invented” for Hebrew worship, or used for his still earlier ritual for bringing up the ark to Jerusalem, appear in Scripture. Because the translators may not have been experts in music, as they were not in comparative languages, much confusion in identifying the instruments has resulted, even as the jewel passages in the Bible are subject to dispute. When King David, girded in a simple linen ephod of priesthood, led the singing and playing procession up to Jerusalem with the shout of the trumpet, he and “all the house of Israel played before Jehovah with all manner of instruments made of firwood, and with harps, and with psalteries, and with timbrels, and with castanets [some authorities translate ‘sistra’], and with cymbals” (II Sam. 6:5). The list given by the Chronicler writing of this same historic musical event in Israel's destiny is practically identical, except that it stresses the religious ecstasy of the musicians who “played before God with all their might” (I Chron. 13:8). The list of Hebrew musical instruments given in the last

Psalms is the same: “Praise ye Jehovah . . . in the firmament of his power” with trumpet sound, with psaltery and harp, with timbrel, with stringed instruments and pipe, and with loud, high-sounding cymbals. We have already described trumpet and timbrel.

The older Hebrew stringed instrument was known as the *kinnor*, a lyre or harp of almag or other wood, trimmed sometimes with amber or metal and fitted in earliest times with twisted grass and later with gut strings or intestines of sheep. They were probably small, portable *kinnors*, or lyres, which the exiled Israelites hung on the willows of Babylon when they sat down to rest after their captors had compelled them to sing “the songs of Zion” in a foreign land—an occasion which must have pleased the less musical Babylonians of that era. The skin bottle-shaped *nebel* was another of David's stringed instruments. It was among those played by the band of prophets whom Samuel commanded the newly anointed King Saul to join, that he might be made “another man”: “thou shalt meet a band of prophets coming down from the high place with a psaltery, and a timbrel, and a pipe, and a harp . . . prophesying” (I Sam. 10:5). Other shapes of harps and lyres in vogue included the widely popular U-shaped lyre we see on Jewish coins of the second century B.C. and the *kinyra*, related to the later Greek *kithara*. There are those who believe that the Jewish *nebel* may have been a harp or a dulcimer. The latter, a zither-like instrument having a shallow trapezoidal box and as many as eighteen quadruple strings tuned by pegs, is popular in Iran and Iraq. Garstang believes the *nebel* may have been a psaltery. Post thinks it was an Assyrian type of triangular harp, carried by a strap girdling the waist of the player as he strummed, holding it upright. Illustration 175 shows an old zither from Hebron.

The harp family has led to endless confusion. If we translate the first instrument mentioned in Ps. 33:2, American Standard Version, as “harp,” then the second one proves to be “a psaltery of ten strings.” The Version mentions in this same verse three instruments: harp, psaltery, and “an instrument of ten strings.”

DAVID'S PART IN ORGANIZING SACRED MUSIC

There has been much scholarly discussion as to whether David founded the system of Jewish music employed for generations in worship at Jerusalem. An extremely critical viewpoint is maintained by Robert Pfeiffer, of Harvard. He believes that the liturgy of Israel was organized after the Exile, and that the author of Chronicles (c. 350-250 B.C.) threw back to David's time the organization of musical guilds because, for example, he wished to play up the singers' guild and the doorkeepers' "union," who were striving for still higher rank. The Chronicler's use of early material is a challenge of scholarly minds. Pfeiffer believes that "none of the Psalms could have been written by David . . . the language, style, and religious conceptions of the Psalms of David are radically different from those of his time" (*Introduction to the Old Testament*, p. 626). He attributes the agelong credit given to David for many of the Psalms to the fact that it was natural for admirers of the great king, musician, rescuer of the ark, and founder of the sanctity of Zion to flash back to his authorship the work of later guilds of musicians. The ancient East has this way of assigning legendary sources to men they admire. Syrians, for example, like to tell today how mighty Baalbek, in the Beka'a Plain between the Lebanons, was established by Cain as a fortress against Abel. Some Palestinians still point to "the tomb of Adam" inside the Church of the Holy Sepulchre in Jerusalem.

We incline to the more moderate viewpoint of Albright, who believes that David could and probably did organize guilds of Temple musicians at Jerusalem. He shows in his *Archaeology and the Religion of Israel* that even before his time Canaanite temples at Ugarit (Ras Shamra) (1400 B.C.) had temple personnel of singers and instrumentalists. He believes that Canaanite (Phoenician) music, drawing on still more ancient sources, exerted a wide influence upon Hebrew music and upon that of Greece and Egypt. Psalms of both the Davidic and the postexilic periods show distinct Canaanite influence. He believes that

the musical guilds of the later Hebrews go back to old Canaanite families whose names became a part of Hebrew family names. Basing his information on tablets found at Ugarit, Albright is definite in concluding that Phoenician music outshone all contemporary music, and that the Israelites who adapted it outdistanced their neighbors by so doing.

The author of Nehemiah, stating the ordinances for the Temple service, pays tribute to the musical liturgy of Davidic roots when he tells that the repaired Jerusalem wall was dedicated "with singing, with cymbals, psalteries and with harps," and processions led by "musical instruments of David the man of God" (Neh. 12:36).

Albright believes that the Chronicler was Ezra himself (400-350) who "organized" Judaism's worship and society after the Exile. He is reluctant to deny David the authorship of the little psalm incorporated in II Sam. 23:1-4, including the allusion to "the sweet psalmist of Israel" and the lovely lines:

One that ruleth over men righteously,
That ruleth in the fear of God,
He shall be as the light of morning, when
the sun riseth,
A morning without clouds,
When the tender grass springeth out of the
earth,
Through clear shining after rain.

And we are among those who feel that David's actual experiences are expressed in the crown jewel of Hebrew song, Psalm 23, and also in Psalm 24 and many others.

The heading of certain groups of Psalms, "The Sons of Korah," indicates names of ancient musical hereditary guilds. For a later list of the leaders of harp guilds, players of horn and cymbal, and teachers of singers, see I Chron. 25 and 26. Asaph, Heman, Jeduthun and the doorkeeping Sons of Korah and Meshelemiah, who were promoted from doorkeepers to musicians, are prototypes of the ever-jealous church musicians who have striven for prestige through the centuries.

There are too many indications of David as musician himself and as founder of liturgical music for Hebrew worship to toss aside the traditional credit given him.

For a refreshing creative presentation of David, we suggest Duff Cooper's *David*. The author recalls the Talmudic material about the shepherd-king's hanging his lyre at the head of his bed, where night winds played tunes and he quotes Browning's lines of how David protected his strings by twining lilies about them.

In spite of the obscurity surrounding himself and his work, Habakkuk has to his credit at least a part of the beautiful religious song in the third chapter of the book bearing his name—a song "For the chief musician," to be accompanied on stringed instruments, "set to Shigionoth," whatever that may actually mean as to rhythm. It is a prayer of utter confidence in God, possibly written against the Chaldean emergency felt by Israel in 600 B.C. or the Greek crisis of a later period. At any rate, it brilliantly portrays the day of Jehovah's coming, with rays of light emanating from his hand:

The everlasting hills did bow.

.....
The sun and moon stood still in their habitation.

—Hab. 3:6, 11

Curt Sachs, in his recent volume, *The Rise of Music in the Ancient World*, parts company with critics who have long said that music of the early Middle East was voluptuous, noisy, and devised to drown out the cries of Phoenician victims burned at altars of Moloch. Power, dignity, and creative skill marked much of the ancient music of Bible lands. Even Greeks were proud to acknowledge themselves debtors. Sachs finds that old communities of Jews in Yemen, Babylonia, and Persia, who were separated from Jerusalem influences after the Exile (597 and 586 B.C.), preserved in a surprising manner traditional vocal music which for 3,000 years has continued without interruption. Some of the pure old liturgical music of the Hebrews, says Sachs, has counterparts in Gregorian melodies. He reminds us that the music of the Temple worship involved use of large orchestral ensembles, as did the court music of Egypt, Elam, and Babylonia. The unaccompanied singing of modern cantors did not spring from ancient Bible customs.

The Chronicler, as Pfeiffer suggests, was primarily interested in vocal music. He quotes hymns, psalms, doxologies in his text and helps us understand that instruments were made primarily to accompany the choirs.

MUSIC IN POSTEXILIC WORSHIP AT JERUSALEM

A detailed picture of the musical accompaniment of worship in the Jerusalem Temple in the time of King Hezekiah (720-692 B.C.) three centuries after David is given in II Chron. 29:25-30. Levites stood fast by the instruments of David, as Nathan the prophet had commanded, and the priests blew the trumpets, as the offering began to burn on the altar and the songs to ascend: "And all the assembly worshipped, and the singers sang, and the trumpeters sounded; all this continued until the burnt offering was finished. And when they had made an end of the offering, the king and all that were present with him bowed themselves and worshipped." The people not only sang "praises unto Jehovah with the words of David" and bowed to receive a blessing of consecration from God—king, princes, and humble folk alike—but the people brought in such quantities of animals for sacrifice as thank-offerings, peace offerings, drink offerings, burnt offerings, that there were not enough priests to look after the thousands of animals presented as "consecrated things."

Trumpets blared, and other sacred musical instruments played when Ezra led the people again in their beloved capital at Jerusalem, as so many Jews in our late century long to enter the ancient Temple Arca (illus. 166). "And when the builders laid the foundation of the temple of Jehovah, they set the priests in their apparel with trumpets, and the Levites . . . with cymbals, to praise Jehovah, after the order of David king of Israel" (Ezra 3:10). David had set in motion the continuity of religious musical instruments in the long-run worship of his people. He had instilled in them from the beginning deep religious experiences accompanied by emotions which made these experiences permanent.

JESUS AND MUSIC

Of four references by Christ to music, two have secular settings. "We piped unto you, and ye did not dance," he said as he pictured, in terms of children playing in the market place, the lack of response his own hearers accorded him (Luke 7:32). Again, in his superb Parable of the Prodigal Son, he rightly includes music as an accompaniment of the wanderer's home-coming festival. Luke's Greek word *symphonias*, which we translate simply "music," probably came on that happy occasion from various sweet instruments. Their rhythmic tunes enraged the righteous elder son coming from his work in the field; "as he came and drew nigh to the house, he heard music and dancing" (Luke 15:25).

Matthew (9:23) tells how Jesus, coming into the home of a ruler whose little daughter appeared to be dead, "saw the flute-players, and the crowd making a tumult." These professional musicians were employed at funerals. We have seen, sitting at Herod's Gate in Jerusalem, a group of four blind Arab musicians, waiting to be employed for a funeral or a wedding.

But the finest evidence of Jesus' inheritance and use of his people's traditional music is this: "And when they had sung a hymn, they went out unto the mount of Olives" (Mark 14:26).

OTHER NOTABLE BIBLE SCENES INVOLVING MUSIC

In addition to the important pictures given by Samuel and the Chronicler of David's musical prowess and the establishment by him and his successors of the ritual of music at the Jerusalem worship center, the Bible offers many accounts of events accompanied by music. The crowning of Solomon is an example. After the priest Zadok had anointed him with oil from the Tent, the trumpet was blown, and the people shouted, "Long live king Solomon . . . and the people piped with pipes, and rejoiced with great joy" (I Kings 1:39, 40). Similar is the dramatic crowning of the little boy Joash, son of Ahaziah, who had been hidden away in a bedroom for six years by his nurse to prevent his being slain by the wicked woman Athaliah. The

priest Jehoiada, after delivering to the army captains the spears and shields which had once been King David's, put the crown upon the head of Joash, and the people "clapped their hands, and said, Long live the king," as trumpeters blew their salute. Little wonder that when Athaliah, coveting the throne for herself, saw the young king standing by the pillar in the House of Jehovah, she screamed, "Treason, treason!"

According to Isaiah, the revels of Babylon were accompanied by the noise of viols at night (14:11)—typical of night life in all corrupt cities of the East throughout all centuries.

Passover celebrations at the Second Temple called for reed pipes in the rendering of Psalms 113-118 (The Hallel).

Paul, writing to the Corinthians, appealed to their knowledge of music. Denouncing the Greeks' tendency to speak with many words, in mysteries and prophecies not understood by anybody, he said, "Even things without life, giving a voice, whether pipe or harp, if they give not a distinction in the sounds, how shall it be known what is piped or harped? For if the trumpet give an uncertain voice, who shall prepare himself for war?" (I Cor. 14:7, 8).

When John, with consummate artistry, was writing on the craggy heights of Patmos his description of the ethereal adoration of the Lamb "standing on Mount Zion," he wrote of "harpers standing with their harps," surrounded by a multitude of singers pouring forth "a new song before the throne" (Rev. 14:2, 3). Again, John used music as a metaphor when, picturing the fall of Babylon [Rome], he said that in the great city there were no more harpers, or minstrels, trumpeters, or flute-players (Rev. 18:22).

EGYPTIAN MUSICAL INSTRUMENTS

The people of the Nile Valley, with their great love of life and their characteristic yearning for immortality, have left us as many depictions and specimens of their musical instruments as the Hebrews have left us few. Their favorites were harp, lyre, lute, and flute. These were used by

orchestras at secular banquets, in temple processions, and at the grave. Although Egyptians have left us no clear record of their notations of music, scholars believe that this intellectual people, who devised astronomy and mathematics at an early date, doubtless worked out a musical system in the early dynasties. Perhaps some of this system survived among the ancient Greeks, who were always prompt to borrow whatever they found good, even though they invented no musical instrument of their own.

TYPES

Sir Flinders Petrie, in *The Wisdom of the Egyptians*, gives an excellent brief account of instruments enjoyed by ancient Nile Valley people and presents several pages of line drawings which help us to visualize the harps, lyres, lutes, drums, sistra, flutes, and flute scales. He believes that tenor flutes, as long as 40 in., were used as early as the Fourth Dynasty. He considers these and the double flutes, or wood-reed oboes, as distinctively Egyptian as the lute is Syrian and the harp and lyre are Semitic. Egyptian flutes were sometimes the short type, held horizontally, but more often the very long sort, held obliquely, or the slender vertical type. Under the Old Empire, two flutes were popular: the long one, held behind the player obliquely, and a short, horizontally held one. Under the New Empire, double flutes were the style. Another wind instrument used by the Egyptians was the trumpet, an amazing silver specimen of which was found in the antechamber of the Tomb of Tut-ankh-amun. This lovely instrument, trimmed with gold and dedicated to the legions of Ra, Amun, and Ptah, was probably played in the elaborate burial pageant which escorted the body of the young king to Valley of the Kings. It had played the salute in his lifetime, as he and his general saw their armies march past the royal reviewing stand. The instrument terminates with the same "bell" shown in the Hebrew trumpets on the Arch of Titus at Rome. These long silver trumpets may have been archaic ones, used in the Eighteenth Dynasty for sentimental reasons. Petrie believes that Egyptian

trumpets had military use, as among Jews and Romans.

Of stringed instruments Egyptians were very fond. They used triangular harps known as "trigons," with upright arms and lower pieces at right angles, in the Eighteenth Dynasty, although, like the Sumerians, they had been harping on other varieties since early times. Ornamented harps, with inlay and carved heads, have been found in tombs, but none are so beautiful as the Sumerian harps from Ur. We have seen a harp with twenty-two strings, whose sounding box was covered with green leather. The outstanding contribution of Egypt in this respect was the standing great harp of the Ramesses III period (c.1198 B.C.-1167), called "the grandest harp of all times." It was played by male musicians and appears in a recovered wall painting from that era (see Edgerly, p. 100, for picture). The Old Empire players used, also, the medium-sized harp with six or seven strings. The small, dainty type, carried on the shoulder, was characteristic of the New Kingdom only. Lyres appear in early art portrayals of Egyptian musicians—of the same sorts used by Hebrew neighbors, who may have introduced them.

Lutes played by gauzily dressed girls were popular. The hieroglyph for lyre, *nefer*, is common in inscriptions. Petrie traces the lyre to the Amu or bedouin people of the Twelfth Dynasty. To Syrian origins he credits the lute and the standing-on-a-base lyre.

One of the most beautiful Egyptian sacred songs which have come down to us is the Song of the Harp Player, translated in Breasted's *The Dawn of Conscience*. This was carved upon the Theban tomb wall of an Eleventh Dynasty king, about 2100 B.C.; below it are carved a blind harpist and players of lute and long pipes, seated behind the officiating priest. All the players are singing the Song of the Harp Player. The song accents the advice of the dead King Intef: behold the dismantled walls of palaces and the vanity of life, yet be not too much puzzled about the mysteries of the beyond from which none come to "tell us how they fare"; but increase earthly delights, fashioning affairs "after the mandates of thine own heart,"

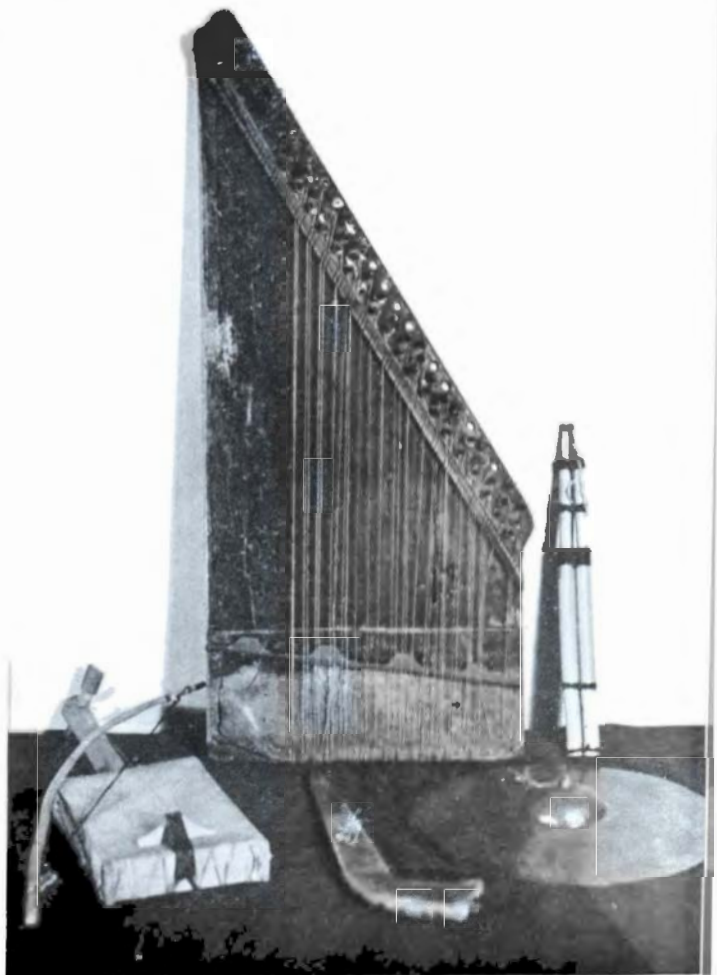
Limestone figure of
player from Cyprus (c.
550 B.C.). Double pipes
popular throughout the
East. The head-cloth
is Egyptian influence.
Metropolitan Museum of



173. Syrian shepherd playing his
pipe as he watches his flock.



174. Harp of lapis, shell, and gold, from Ur before 2500 B.C. Sumerian love of animals appears in the sumptuous portrait of a golden bull's head bearded with lapis lazuli and of animals adorning the front panels as they play ancient musical instruments and carry objects used in worship. Upright, encrusted with shell, lapis, red stones, and bands of gold. (University Museum Philadelphia)



175. Some Hebrew musical instruments: zither from Hebron, double pipes, viol with bow shaped like a hunter's bow, shofar, and cymbal.

until the day of entombment comes. A revealing picture of this tomb orchestra appears in figure 10 of Breasted's book.

Of percussion instruments, Egyptians were fond. They added such pomp and ceremony to temple processions and triumph occasions as modern hearers enjoy in *Aida*. The earliest type of drum was probably the tambourine, accompanying court dancers. Barrel-shaped drums, kettle-drums, and hourglass types were also used. The rattle or *sistrum*, whose handle was carved with the head of Hathor or Isis, was typically Egyptian. Castanets with Hathor-head trimming, found in the Amenhotep I level of Palestinian Beth-shan (c.1546-1525 B.C.), are now exhibited in the Museum of the University of Pennsylvania. Another pair of castanets has the form of two ivory hands, ready to clap in applause. Widely used were brass or silver cymbals, made into large round shapes or into "finger-cymbals," clicked like castanets.

Men and women both were among the court musicians. The latter were especially popular at secular banquets, where girls, clad in long gowns of transparent white material, played six-stringed lyres, harps, double-reed pipes, tambourines, or lutes. To their accompaniment dancers whirled in an increasing orgy of shouting and rhythm, rivaling the Greek orgies in honor of Demeter or the dancing dervishes of the Levantine Jebel Druse today.

Egyptian musical instruments were never played more impressively than in the brilliant processions of college-trained temple priests, marching up the ramp to Queen Hatshepsut's imposing worship center at Deir el-Bahri in western Thebes. Huge choruses and orchestras were maintained at all great temples, and their personnel had in their veins generations of special training. Thebar tombs, such as that of Nakht, which have been opened in our day show such scenes and banquet orchestras.

WHERE WE MAY SEE EGYPTIAN INSTRUMENTS

The golden period of Egyptian musical instruments, from 2500 B.C. to the Persian conquest, reveals its art in museums today. In addition to those we have already men-

tioned, we have enjoyed in the Cairo Museum lutes with tortoise-shell boxes, gilded sistra, and a gold-coated bronze military trumpet with its block of wood still inside to help it retain shape. The Metropolitan Museum of Art displays interesting ancient Egyptian musical instruments. Pictures of some of these are available at reasonable prices.

Egyptian tomb paintings by artists of Queen Hatshepsut's Eighteenth Dynasty depict women oboe-players and dancing children. Women playing lute, lyre, harp, and oboe at a banquet are painted on the Tomb of Djeserkare-seneb at Thebes; this work is considered one of the greatest masterpieces of Egypt. For superb reproductions of these two scenes, we recommend *When Egypt Ruled the East*, by Steindorff and Seele, pages 173 and 184; also page 180 shows an orchestra of three female musicians with tall harp, oboe, and lute.

GREEK MUSICAL INSTRUMENTS OF PAUL'S DAY

When Paul came to Athens, he saw many concrete evidences of the important place music held in the cultural and religious life of Greece, even though Greeks never attained the excellence in music which they reached in the other fields of art.

The sculptured Pentellic marble frieze in the pediment of the Parthenon, then four and one-half centuries old, was just opposite Mars Hill, where Paul delivered his historic address recorded by Luke in Acts 17 (illus. 243). This frieze showed four flute-players and four artists of the lyre, a part of the Pan-Athenaic procession which wound up to the sacred Acropolis from Eleusis.

From that sacred hill he could look directly down, as we have looked many times, into the cavea of the hillside Theatre of Dionysos (illus. 217). There was born the classic Greek drama which had its humble ancestry in the goat songs and dances in honor of the rustic god of grapes, Bacchus, fêted with choruses of flute-playing and tambourine-shaking Bacchic maidens. The very word "orchestra" had its origin in "dance," from which it

came to refer to the instrumental musicians supporting the drama cast. Two flutes were considered an adequate orchestra in early times. In classical times lyre and harp were added. From his same hilltop vantage point, Paul could see the Odeon, or music hall, of the Periclean fifth century B.C., where the superb music contests were held in conjunction with the Pan-Athenaic festival honoring Minerva (illus. 100). It was but a step for Paul to wind down from the Acropolis by way of the Choragic Monument of Lysikrates, erected by the winning director of the boys' chorus at a festival in 335 B.C., sole survivor today, on the Street of the Tripods, of trophies awarded the musical directors on those great state occasions. And if Paul went to a symposium to regale himself with clashes against the sharpest minds of the capital, he was sure to see the merrymaking players of pipes, lyres, and drums strolling about among the couches and tables as the conversation grew too bitter or controversial. He probably heard guests play their own lyres, brought to the banquet. When he went to Corinth, by way of sacred Eleusis, Paul must have known of the wild orgies of ecstatic music which were as much a part of the worship of Demeter as David's ecstatic dancing before Jehovah was part of his ritual in Jerusalem.

The music of the golden age in Greece rooted in the musical ability of the Egyptians, from whom the Greeks probably got their amazing system of notation. We have no extant Egyptian scale but may guess what it was, from the Greeks who borrowed it.

Just as the Hebrews gave David credit for inventing most of their musical instruments, so the Greeks made Hermes (Mercury) the innovator of the lyre which accompanied the great lyrics, odes, and ballads of Greece from Pindar to Homer. The three-stringed tortoise-shell Greek lyre Hermes presented to Apollo, who gallantly honored the nine Muses by adding six more strings.

Small harps, especially the triangular trigon were carried from place to place by bards such as the blind Homer himself. The lyres of the *Iliad* may have been of the Syrian type, seen in Aramaean, Hittite, or Phoenician carvings. Some Greek harps

have as many as forty strings—many more than the lyre. The more graceful form of Greek harp, *kithara*, and the lyre so popular at the Pythian Games were best loved among the Greeks. The latter was pressed against the chest of the player and supported by a band. The *chelys* was a small lyre of tortoise shell or of wood, played by everyone, even as the ukulele of a certain generation in America was annoyingly popular. The Greek *psalterion* was not unlike the psalter of the Hebrews, with its sounding box above.

To Pan, god of the little springs and woodlands known to Paul near Corinth, goes the credit for the pipes of Pan, or syrinx. These reed pipes down the centuries became the ancestor of the pipe organ used in cathedrals and churches of today. To Athena went credit for the cheery bronze flute, although historically the flute probably entered Greece from Egypt, Syria, or Lydia. Used chiefly on outdoor occasions, it was an instrument to which Athenian youths gave much time and study, going even as far as the music school at Alexandria. Their practice hours were such an annoyance to philosophers like Plato that he denounced their music as barbaric. Flutes sounded well, however, at the open-air theaters in the purple twilight of Mount Hymettus. The people loved them because flutes had put rhythm into the everyday life of weavers, rowers, carpenters, and shepherds like those we have seen with their flocks near old Corinth.

As in other Bible lands, musicians were honored in Greece with the best fare their society afforded. Great battle tides were turned when the pipe-players stirred the army to attack, as at the Battle of Salamis. Greek flutes had the same effect upon warriors, as Scotch bagpipes today. And on public worship occasions, the instrumentalists and singers were part of the impressive processions marching gracefully to the columned Greek temples. Similar scenes were characteristic of Egyptian Thebes or the Judaeian capital.

Possibly Paul's reference in his Corinthian letter to "sounding brass or a clanging cymbal" was an echo of his frequent annoyance by players of these flamboyant instruments while he worked in his fabric shop

at Corinth or thought out an address or a letter at Ephesus, center of Greek culture in Asia Minor.

ROMAN MUSICAL INSTRUMENTS

TRUMPETS OF WAR

Like that other war-loving people of the ancient Mediterranean world, the Assyrians, men of the Roman Empire considered music an art for weaklings and slaves who sang of Romulus and Remus at banquets. Flutes they endured at the rites of Bacchus

and Ceres. They did not mind if their daughters played the Greek *kithara*. But they really enjoyed the curved cornu and long straight *tuba* trumpet of the infantry, which sounded signals for the advance to a fresh conquest. In fact, the Romans, says Curt Sachs, claimed that the Etruscans of their peninsula, who originally came from Asia Minor, had invented trumpets at their famous bronze factories. A rather native type of Roman trumpet was the *lituus*, ending in an up-turned bell. The heinous signals of trumpets were the only music, except banquet orchestras, known by the military clique stationed in Jerusalem in the time of Jesus.

ADDITIONAL BIBLE REFERENCES

"the singers also played on instruments of music, and led the singing of praise" (II Chron. 23:13)

"David spake to the chief of the Levites to appoint their brethren the singers, with instruments of music, psalteries and harps and cymbals, sounding aloud and lifting up the voice with joy" (I Chron. 16)

"for song in the house of Jehovah, with cymbals, psalteries, and harps, for the service of the house of God; Asaph, Jeduthun, and Heman being under the order of the king" (I Chron. 25:6)

"the Levites who were the singers . . . and their sons and brethren, arrayed in fine linen, with cymbals and psalteries and harps, stood at the east end of the altar, and with them a hundred and twenty priests sounding with trumpets . . . and praised Jehovah, saying, For he is good; for

his loving kindness endureth forever" (II Chron. 5:12, 13)

"Awake, psaltery and harp:
I myself will awake right early.
I will give thanks unto thee, O Jehovah,
among the peoples" (Ps. 108:3)

"Raise a song, and bring hither the timbrel,
The pleasant harp with the psaltery.
Blow the trumpet at the new moon,
At the full moon, on our feasting day"
(Ps. 81:2, 3)

"every stroke . . . which Jehovah shall lay upon him [Assyria], shall be with the sound of tabrets and harps" (Isa. 30:32)

"Blow ye the cornet in Gibeah, and the trumpet in Ramah: sound an alarm" (Hos. 5:8)

"I will cause the noise of thy [Tyre's] songs to cease; and the sound of thy harps shall be no more heard" (Ezek. 26:13)

"The young men [have ceased] from their music" (Lam. 5:14)

BIBLIOGRAPHY

- Albright, William F., *Archaeology and the Religion of Israel*, The Johns Hopkins Press, Baltimore.
Breasted, James, H., *The Dawn of Conscience*, Charles Scribner's Sons, New York.
British Museum, *A Guide to Greek and Roman Life*, London.
Carter, Howard, *The Tomb of Tut-ankh-Amun*, Vol. 2, Cassell & Co., Ltd., London.

- Cooper, Duff, *David*, Harper & Brothers, New York.
- Edgerly, Beatrice, *From the Hunter's Bow*, G. P. Putnam's Sons, New York.
- Erman, Adolf, *Life in Ancient Egypt*, The Macmillan Company, New York.
- Galpin, Francis W., *The Music of the Sumerians . . . Babylonians, Assyrians*, Cambridge University Press, Cambridge.
- Garstang, John, *The Heritage of Solomon*, Williams & Norgate, Ltd., London.
- Museum of the University of Pennsylvania, *The Royal Tombs of Ur of the Chaldees*, Philadelphia.
- Petrie, Sir Flinders, *The Wisdom of the Egyptians*, British School of Archaeology in Egypt, London.
- Petrie, Lady Hilda, *Side Notes on the Bible*, Hutchinson & Co., Ltd., London.
- Pfeiffer, Robert, *Introduction to the Old Testament*, Harper & Brothers, New York.
- Post, George E., "Music," *A Dictionary of the Bible*, Vol. 3, Charles Scribner's Sons, New York.
- Sachs, Curt, *The History of Musical Instruments*, W. W. Norton and Company, Inc., New York.
- , *The Rise of Music in the Ancient World*, W. W. Norton & Company, Inc., New York.
- Sellers, Ovid R., article, *Biblical Archaeologist*, September, 1941, American Schools of Oriental Research, New Haven.
- Schmitt, Gladys, *David the King*, Dial Press, New York.
- Steindorff, George, and Seele, Keith, *When Egypt Ruled the East*, University of Chicago Press, Chicago.
- Wellhausen, J., *The Book of Psalms, with appendix on Music of Ancient Hebrews*, Dodd, Mead & Company, Inc., New York.
- Woolley, Sir Leonard, *The Development of Sumerian Art*, Charles Scribner's Sons, New York.
- , *Ur of the Chaldees*, Charles Scribner's Sons, New York.
- , *Ur Excavations*, Vol. 2, *The Royal Cemetery*, Carnegie Corporation of New York, for British Museum and University of Pennsylvania.

NUTRITION

He that is of a cheerful heart hath a continual feast.

—Prov. 15:15

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INTRODUCTION

BASIC CONCERN OF PEOPLE IN BIBLE LANDS FOR FOOD

No age has given greater consideration to production and distribution of food than the twentieth century. Yet other civilizations have felt a similar concern. Let us consider the attitudes of people in ancient Bible lands toward their food,

their recognition of its source, their habits concerning its use, and their characteristic varieties of food.

Discussion of food brings us very close to the everyday life of people. The Bible is full of picturesque meal scenes which make ancient peoples seem neighbors to us. When archaeologists stumble upon loaves of unbaked bread, when they find dates and vegetables or huge jars of grain as they did among the rubble of ancient Jericho and

at Pompeii, or when they come upon triangular loaves which were new-baked in Memphis 3,500 years ago, they touch hands with the resurrected past of each of us. Those Egyptian loaves, now in the Metropolitan Museum of Art in New York, are of very coarse, unrefined barley flour and look like the Swedish health bread we enjoy today.

Through thousands of years, people at the eastern end of the Mediterranean have recognized food and clothing as two essentials to existence. Isaiah put it tersely when he spoke of "the whole stay of bread, and the whole stay of water" (3:1); Jacob in the patriarchal age declared that if only God would be with him, giving him bread, all would be possible. All reverent cultivators realized that they planted but God gave the crops. Hebrews felt that Jehovah filled their valleys with corn, so that these laughed and sang. God gave His children "all things richly to enjoy" and crowned every year with satisfying harvests which brought the people together in community thanksgivings. The Feast of Pentecost honored the completion of the grain ingathering. At the autumn Feast of the Tabernacles, families living in booths on top of their flat roofs rejoiced over the garnered fruits and abundant vintage. In chattering companies, villagers made their way to Jerusalem to observe the "cheerful feasts" which the prophet Zechariah longed to see all nations enjoy together. Like the Canterbury Pilgrims of medieval times, companies of hard-working toilers in Palestine looked forward from year to year to their sacred, sociable journeys.

People in Bible lands have always treasured their food. They have generally lived not far above the subsistence level. Hunger has been the lot of the multitude. Chronic scantiness was taken for granted as something to be endured. When Jeremiah voiced a rebuke to his wayward hearers, he threatened them in terms of a nation which would come from afar, eat up their flocks, harvests, and bread, and make way with good things which ought to have been enjoyed by the sons and daughters of Zion (Jer. 5:15-17). To famished Israel, festivity always included heavy eating. Happiness then, as now, in Palestine, Syria, Egypt, Mesopotamia, Greece, and Italy was

synonymous with food abundance. Picturing a golden age when even men who had no money to spend at food stalls would secure food and drink "without money and without price," Isaiah brought a welcome message. The poverty-inducing gluttony decried in an ancient Hebrew proverb was not an easy vice. Gormandizing reached its biblical peak at the riotous feast of Belshazzar and a thousand of his lords (Dan. 5:1). Paul had much to say against the gormandizing of his own Roman age.

Famines are a part of the social background of families in Bible lands. They were due to locust, spoliation, or laziness of man, or to invading armies, like that of Tuthmosis III who carried off crops to Egypt. The repeated "descents" into Egypt from patriarchal times on were given impetus by acute food shortages. The better record of Egypt in the matter of steady food supply is attributed to the fact that her fertile fields are fed by dependable Nile inundations. Floods at the river's source filter through to the smallest canals of Nile Delta farms. There is little wonder that hungry neighbors were always turning up, money in hand, to buy food supplies.

Overeating is a vice in Bible lands today. Nelson Glueck, the eminent American archaeologist who has been exploring ancient villages in fertile Transjordan and has received an embarrassing succession of goat feasts in his honor, tells of visiting rich bedouin sheiks in eastern Palestine. They begin their feasts at dusk and continue eating far into the night, until they literally roll over on the floor of their tents from sheer inability to consume further viands. These hospitable people know no rationing. They ask no guest to supply his food card when he appears at their highland settlement. Perhaps the ancient, Ghandi-like asceticism of John the Baptist was a revolt from such scenes.

CUSTOMS IN CONNECTION WITH FOOD

"AT THE KING'S TABLE"

IN PALESTINE

The household of the court witnessed many intrigues hatched about the low

dining table. Hence, the counsel of the old Hebrew proverb,

When thou sittest to eat with a ruler,
Consider diligently him that is before
thee. . . .
Eat not the bread of him that hath an evil
eye.
Neither desire thou his dainties:
. . . his heart is not with thee.

—Prov. 23:1, 6, 7

Even ordinary meals at the table of Judah's kings were shared by great numbers of people who were vassals and favorites. Saul was enraged when David absented himself from Gibeah: "the king sat upon his seat . . . by the wall; and Jonathan stood up, and Abner sat by Saul's side: but David's place was empty." When Jonathan tried to excuse his friend by saying that he had gone to Bethlehem to observe a family feast, this did not suffice. David himself was more gracious when he came to power. For when he invited the lame son of Jonathan, Mephibosheth, to come to his court from Lo-debar, he said, "Fear not; for I will surely show thee kindness for Jonathan thy father's sake . . . thou shalt eat bread at my table continually" (II Sam. 9:7).

Thus, for various reasons, the king's table attracted numbers, so that the stewards had to amass great flocks and to search the countryside to fill their pantries. By the time Solomon came to court in his cedar-trimmed, Phoenician-designed palace at Jerusalem, the royal table was breathtaking. When the Queen of Sheba arrived as a visitor from the rich south, the proud heart went out of her at the sight of the king's golden tableware. Tasty foods were garnished with luxury touches imported from afar by Solomon's trading seamen and by vassal-kings. The Queen of Sheba herself brought Solomon spices from her own noted Arabian caravans.

Doubtless Solomon had his summer meals served in such a garden as we glimpse in the exotic Song of Solomon—a garden refreshing with fountains and with shade from vines, pomegranate orchards, and mulberry trees. A banquet house among apricots is luxury enough in any era. To encourage Israel to strive for a golden age of redemption and happiness, the prophet

Amos held out promises of fruit gardens for everyone.

Nehemiah, governor of Jerusalem and supervisor of the rebuilding of Jerusalem's walls after the Exile, entertained at his well-stocked table 150 men, "besides those that came unto us from among the nations that were round about us." One day's marketing included an ox, six sheep, many fowls, much fruit. For this abundance Nehemiah expected no return hospitality, because his guests were poor.

Jezebel, at the hilltop court of evil Samaria in Israel, entertained at her royal table a whole college of 400 priests of Baal and 400 priests of the Asherah. Less royal but more moral was the board of the woman of Endor, who brought to fugitive Saul fatted calf and unleavened bread freshly made (I Sam. 28:24, 25). A "great woman of Shunem" served Elisha time and again the best foods from her larder when the itinerant man of God swung by her way.

ASSYRIAN, PERSIAN, AND CHALDEAN BANQUET SCENES

One of the few pleasant art portrayals of life in cruel Assyria shows a dining scene where King Assurbanipal is feasting with his wife in the Nineveh palace garden about 650 B.C. It is described by Stanley L. Caiger in his *The Bible and the Spade*. The king is seen stretched on the customary dining couch, with his head on a round pillow on which his left arm rests; he is lifting to his lips a handsome bowl. His wife is seated on a sort of glorified infant's "high chair," with her feet resting on its shelf. She, too, is lifting a brimming bowl to her royal lips. Servants with fly-whisks stand at hand, and under the date palms and grape vines are musical instruments, waiting for the musicians to take up their strains for the king's entertainment.

The picture of the Persian palace entertainments of Ahasuerus and Esther tallies well with the known customs of the fifth century B.C. at Shushan (Susa). The accurate details tempt us to believe that the Book of Esther was written contemporaneously with the events it describes rather than in the more probable second century

B.C., during the period of John Hyrcanus. The guest list included at this royal banquet princes of Media and Persia, noblemen, and governors of vassal provinces. The feast lasted 140 days, at the close of which the entire palace staff, great and small, were invited to a huge garden party in the king's own park, equipped with banquet couches of finest gold and silver trim. The awnings and curtains shielding the company from intense sunlight were of the royal Persian colors, white, green, and blue, attached to marble pillars with purple cords. While this drinking bout was proceeding in the garden nook, where the guests were using such elegant shallow golden bowls as that one which the Iranian Exhibit showed in New York in 1937, Queen Vashti was giving a feast to the palace court women. This event was outshone by the banquet which Vashti's successor, Esther the Hebrew, arranged (Esther 5:5). That festival became the foundation of the joyous Purim Feast which Jews to this day celebrate in late winter on the fourteenth and fifteenth days of the twelfth month (Adar), when they recall the triumph of Mordecai over the plot of Haman. The banquet tendered Queen Esther by Ahasuerus and the fast observed before the banquet by Esther are described in the Bible book bearing her name. The details of putting on the royal apparel, costly perfumes, gleaming jewels, crown, and accessories are all given. So, too, the viands which were served in the palace garden at Shushan, true to Persian ways, are listed. Looking at the dusty tell, or mound, which partly covers the palace where these banquets took place—or, if the Book of Esther is historical fiction, feasts like those of the Jewish Queen—we feel close to the courts and streets where this heroine once walked. Two other great Hebrew personalities are linked with Shushan: Nehemiah, who extended the golden cup to the king, Artaxerxes (Neh. 1:11); and Daniel (Dan. 8:2), who had royal-banquet experiences also in Babylon, where as a youth in the palace school he declined dainties from the king's table, preferring to live on simple pulse (beans or peas), and where he interpreted Nebuchadnezzar's dream of the fruit tree.

But the choicest of the four banquets

described in the Book of Esther is her wedding feast, tendered by the king to all the princes and vassals. This was a time for releasing provinces from some of their burdensome taxes, and for sending portions of food broadcast, from the bounty of the king, who was hilariously generous, inspired by the charm and beauty of his Hebrew queen. Jesus in the Nazareth synagogue no doubt heard related time and again the story of Esther and her Uncle Mordecai.

Belshazzar's infamous feast, depicted in the prophetic Book of Daniel (written probably after 200 B.C., and certainly not during the reign of any of the rulers chronicled in it) gives us a glimpse of the garden banquet of the Chaldean Belshazzar, "son of Nebuchadnezzar." He feasted a thousand of his lords, making a spectacle of himself in drunken debauch, using the sacred vessels from Jerusalem's altar for the orgy. In the midst of the wild party a mysterious hand wrote upon his wall. Daniel interpreted the words as spelling the immediate doom and division of his kingdom, which soon fell from Babylonian control to that of the Medes and Persians. The three words on the wall, "mene, tekul, upharsin," which sound oddly like the names of coins, the Babylonian mina, the shekel, and the half-mina, probably can be interpreted "numbered, weighed, divided."

One of the earliest banquet scenes of which we have contemporary record in art is depicted on a tiny lapis-lazuli cylinder-seal in the Museum of the University of Pennsylvania. We have seen in this fascinating gem carved before 3000 B.C. a banquet of Queen Shub-ad. Guests are seated on little stools, probably of reed, receiving from flounce-skirted servants goblets of wine. Other palace attachés attempt to waft away the hot Babylonian air, while one stands playing a bow-shaped harp.

An early Babylonian domestic scene is represented on a seal in the University of Pennsylvania, showing a mother from Ur feeding a bunch of the famous Euphrates dates to a child on her knee.

EGYPTIAN BANQUETING

It would have been delightful to be banquet guests in the Egypt of Old Testa-

ment times. We should select, if choice were given us, a feast at the palace of the remarkable young monotheistic reformer, Akhenaton, in his new City of the Horizon Aton (Amarna), built between 1387 and 1366 B.C. From actual excavations of his palace and from recovered wall paintings, we know what the *mise en scène* of our banquet would have been and what foods would have been served to us. The state dining hall where Akhenaton, his wife, Nofretete, and their three little daughters would have welcomed us was impressively spacious, although too rapidly built. Its roof was supported by pillars with bright-colored capitals, on which were carved geese and flowers, especially the favorite lotus. Garlands hanging from the pillars gave an airy fragrance and freshness. Slaves cooled the hot atmosphere of Egyptian evening by waving ostrich fans with ivory handles. Outlining the pavilion roof were carved cobras, to devour lurking enemies. Under a kiosk at the center of the dining room was the banquet table, with gaily cushioned couches and chairs near-by. For Egyptians lived in a happy atmosphere and enjoyed what we today call "gracious living," a standard which they tried to carry with them beyond the grave, by making their tombs miniature models of their homes.

Off the dining room of Akhenaton were the royal bedrooms, and quarters for musicians and dancers who entertained the guests. From the kitchens beyond these apartments, suggests Arthur Weigall in his *Life and Times of Akhenaton*, dishes of fruit and native delicacies were constantly carried into the various palace rooms. We should have liked best to be guests when the royal family were using their summer dining room in a garden on a tiny island on an artificial lake, where sunset reflections were softened by a cool colonnaded portico. Life was pleasant for the rich in the New Kingdom of Egypt.

The Old Testament narratives of Gen. 40 supplement what we learn from the wall paintings in which Egyptians recorded their customary manner of eating. There we see the birthday banquet of a pharaoh of Joseph's time. This was an occasion when the king elevated to new honors his chief butler and baker, in appreciation for

"all manner of baked food" which they served him and for the fresh grape juice pressed directly into his golden cup from clusters grown on the royal vines. The plentiful foods served at such a feast included roast beef, chicken, fowls, pigeon, vegetables of all sorts, barley beer, and elaborate condiments. Servants dragged in huge jars of wine and handed the guests bent glass tubes or siphons, which they dipped directly into the vats. They drank until they fell to their couches near the low tables, drenched with perfumes and ointments provided by women servants. Tomb art shows them wearing at festivals, queer cones on top of their heads. These may be cones of ointment which melted as the banquet proceeded. Desiring to prolong their choice toilet articles into the future life, Egyptians stocked their graves with many artistic ointment boxes, perfume flasks, and unguent spoons. The anointing which prevailed in homes of wealthy Palestinians in Bible times was a definite Egyptian influence.

Both men and women attended banquets in Egypt, where women rulers such as Tiy and Nofretete and Hatshepsut were influential. Several times during the evening, lotus blossoms were pressed into the hands of the guests. The clean-shaven men wore white banquet garments, meticulously plaited or goffered in sunbursts. Around their necks were gorgeous flat, wide necklaces of enamel and jewels. Women guests wore long white gowns of transparent fineness. Rings, collars, and bracelets of faience (glazed clay) were given as banquet favors. Some of these are in the Metropolitan Museum of Art today. We can fancy the elation of Hyksos princes from Asia Minor, when such ornaments were handed to them and their families at feasts and athletic contests, while political plots were arranged. Only a few generations later these same Hyksos mastered Egypt for themselves (c.1730-1555 B.C., Albright).

James H. Breasted, in his *Ancient Times* (p. 530), gives an illuminating picture and description of how an Egyptian banquet hall of the era of King Ptolemy II (285-247 B.C.) looked. Erected in a garden, it towered more than 90 ft., lifting its columned central portion higher than the side aisles to form the clerestory effect

which later was used in European cathedral structures for more light. Couches, accommodating two persons each, had small gold and silver tables within reach of guests. From extant records of this sumptuous and now wholly vanished banquet hall, we know that it had purple-embroidered draperies for its 100 couches, and cool, white-bordered, scarlet awnings kept out the glare of the Egyptian sky. Wealth is implied by such a setting.

One of the best extant pictures of an upper-class table scene was found at Syrian Beth-pelet. This fragment from the Nineteenth Dynasty (c.1319 B.C.) shows an Egyptian viceroy sitting on a cushioned throne extending his thin arm to receive a bowl proffered by a butler who wears the same sort of plaited robe as the governor. Foods in the form of roast ducks, a calf, and fowled birds are being carried in by kilted farm workers, herdsmen, and hunters. The usual musician and dancer are furnishing a program. This whole scene helps us visualize the butler of Joseph's story, "who gave the cup into Pharaoh's hand" (Gen. 40:11).

The forty-third chapter of Genesis gives a detailed picture of the luncheon given by Joseph, overseer of Egypt, for his shaggy Hebrew brothers. It took place at noon, not at the evening hour usual for entertainment. Joseph's steward issued the invitation, escorted the brothers to basins of water for their feet, gave them food for their asses, and led them in with the gifts they had brought to Joseph from his old father, Jacob—"the choice fruit of the land . . . a little balm, and a little honey, spicery, myrrh, pistachio nuts, and almonds." No wonder that Joseph was completely overcome, when he received this "box from home" and greeted his unkempt brothers in his palace! Was this palace, we wonder, at Avaris, the Hyksos capital?

Egyptians would not eat at table with foreigners, lest this imply equality; and odorous shepherds were "an abomination" to well-groomed, neatly attired Egyptians. Thus Joseph sat at one table, his local colleagues at another, and the Hebrews at a third. Much to the surprise of the guests, Joseph seated his brothers in the order of their ages. When he dished out the food, he served the youngest, Benjamin, five

times as much as the others. Did Joseph, we wonder, drink from his famous silver cup, which he used in divining events for Pharaoh?

For fictional treatment see "Joseph the Provider" (Mann).

GREEK BANQUET SYMPOSIUMS

In Paul's era, Greek banquets were aesthetic and intellectual gatherings. To be a guest at dinner in Athens meant joining the keenest minds of that marble city for the symposium which followed the meal. The food itself was of less interest than the superb painted pottery, for which the whole world honored Attica, and the choice carved cups, ladles, and pitchers which brought on the food. The fare consisted of an intricate stew, with meat cut in small pieces, for knives and forks were not yet in common use. Of course, in season, there would be mounds of luscious grapes, in great white clusters, grown near Corinth or Marathon.

But the symposium after the meal was the real dessert. After the large tables near the couches had been removed, and smaller ones brought in for the nuts and condiments of dried fruit, the talk ran on far into the night. Philosophy and politics vied in interest. As in the Agora by day, so at banquets by night, Athenians, as well as Corinthians, chatted of "every new thing" and every new ship arrived from Alexandria or Tyre. Similar banquet customs prevailed in all the Graeco-Roman cities of Palestine and "beyond the Jordan." Long into the cool night, festivity continued, until chariots of guests clattered through the streets, meeting workers coming to their tasks at dawn.

DESERT MEALS, IN OLD TESTAMENT TIMES AND NOW

NOMADS' HOSPITALITY

Some of the finest examples of sincere hospitality in the Old Testament occur in the patriarchal narratives. These very early portions of Scripture are rich in human interest and in religious suggestion. They come to life again today, especially in the Desert of Beersheba, on the Syrian Desert



1-6. A kindly Arab peasant riding his useful donkey to market bearing a basket of greens.

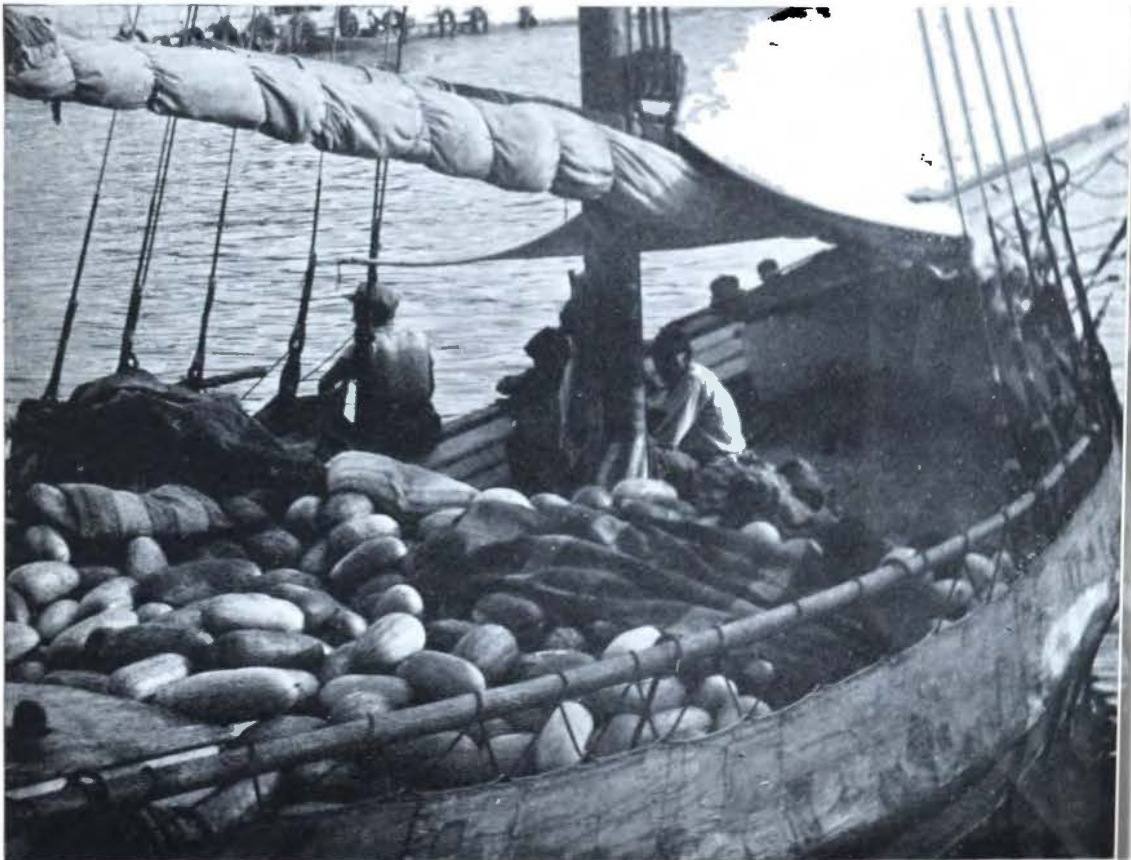
1-7. Noontime meal of parched grain and coffee prepared by harvesters near Beersheba. Left, a basket of charcoal, stove, coffee pot, and small cups.





178. Village women resting on the wall of Jerusalem's Citadel, as they count profits from the sale of vegetables.

179. Melon boat, docked at Patras, Greece, waits for customers. Melons have long been a coveted summer fruit throughout the Middle East.



80. A boy of Galilee on the shore of the Lake, with two small fishes (John 6:9).



181. Salt-evaporation pans along the Mediterranean (Matt. 5:13).





182. Palestinian sop dishes with a water cruse (John 13:26).

183. Flat loaves of Syrian bread for sale in shops of Nablus (John 4:8).



edge, or in highlands of Transjordan. There, as soon as a bedouin, returning with companions from a journey, comes within sight of his own hillock and tents, he exclaims. "My house of hair! Come home and eat with me!" These words echo the ancient phrase of the prophet of Bethel, "Come home with me, and eat bread" (I Kings 13:15).

The sojourner, even when arriving uninvited, is sure of food, shelter, protection from enemies, and the tutelage of the god of the family. He is welcome for as much as three days and four hours, the length of time his hosts believe their food is sustaining his body. By sharing the bread of the tent family, he is adopted as one of the group. Few questions are asked. He is considered the "guest of God" and treated well, because his host knows not when he will be obliged to ask for similar shelter.

Flat loaves of fragrant, coarse brown bread and milk make up the backbone of the meal. A fresh-killed and roasted goat is served if circumstances permit and if the sojourner has arrived early enough in the evening. If the meal is elaborate, it is a *dhabihah*. Not only family but neighboring tent dwellers stroll in to enjoy the huge common bowl of food (illus. 182), from which they dip with their fingers as the company sits on the ground. A good host will regale his company with stories of the desert for hours at a time, until, sensing the weariness of the "guest of God," he puts him to sleep on the ground, near his own mat, and covers him with his finest camel's hair. If the guest has come by ass or horse or camel, barley or oats will be supplied. The animals are tethered near or under the huge central tent.

After the men's party has eaten to satiety, the remnants and the bones are carried to the women and children, and then to the watchdogs.

The shameful violation of hospitality is recorded in the tale of Sisera and Jael in the period of the judges, and in the Joab and Abner treachery of the David saga (II Sam. 3:28ff.).

A strange hospitality tale is told in Judg. 19, 20. A man of Gibeah invited to his home a Levite and his entourage, travelers who were sitting in the street because no-

body had offered them shelter. When a crowd of rowdies from the town demanded to know to whom the old man was giving fodder for the animals and food, drink, and lodging for the company, the host tried to protect his guests by substituting his own virgin daughter and the Levite's concubine to the curious mob. The incident precipitated a war between tribes of Israel and the Benjamites of Gibeah.

BABYLONIAN, CANAANITE, AND EGYPTIAN HOSPITALITY

Babylonia, as well as ancient Palestine, dispensed the same hearty hospitality we see in Saudi Arabia today. *Canaanites*, too, were so meticulous about hospitality that they subsidized local gods to protect strangers in their midst, as we have learned from the Ras Shamra texts. *Egypt*, also, gave sanctuary to worthy refugees, as we see in the beautiful story of the flight of Mary, Joseph, and Jesus to the shadows of the pyramids and the shrines of Heliopolis. Certain Egyptian words concerning hospitality (in the Book of the Dead) sound oddly like the saying of Jesus in Matt. 25:35, 36. "I have given bread to the hungry man," runs the Egyptian passage, "and water to the thirsty man, and apparel to the naked man, and a boat to the shipwrecked mariner. I have made holy offerings to the gods, and sepulchral meals to the *khus*." One of the customs of Egyptians and Syrians in ancient times was to establish a threshold covenant with a guest by smearing on the doorsill blood from a newly killed animal.

PALESTINIAN PATRIARCHS ENTERTAIN

Examples of patriarchal meals include the story of Jacob and Esau, which stresses the keen appetite of the old father, Jacob, for "savory food" built around venison (Gen. 27). He considered such a meal a fit occasion for giving his paternal blessing to his son. Another characteristic Bible picture of desert hospitality comes in the betrothal story of Isaac and Rebekah. To avoid choice of a Canaanite wife by his son, with all the risks this would involve for his Hebrew way of faith, Abraham dispatched his servant to his old homeland in

Mesopotamia (Gen. 24). The man was found by Laban at the fountain, watering his camels. In as fine an invitation as we have from this age, Laban addressed the man: "Come in, thou blessed of Jehovah; wherefore standest thou without? for I have prepared the house, and room for the camels. And the man came into the house, and he ungirded the camels; and he gave straw and provender for the camels, and water to wash his feet and the feet of the men that were with him. And there was set food before him to eat: but he said, I will not eat, until I have told mine errand."

ENTERTAINING "ANGELS UNAWARES"

Several Old Testament narratives include hospitality to "angels." These were remembered by the author of Hebrews in framing the exhortation, "Forget not to show love to strangers; for thereby some have entertained angels unawares" (Heb. 13:2).

Certainly, Abraham, the shepherd-sheik with his prosperous tents pitched near Hebron under the shady oaks of Mamre, whose descendants mark the place today for imaginative beholders, offered his very best to "three men" who proved to be "angels." He ran to meet them, as from his tent door he saw them coming. Begging them to tarry in this lonely region, he set before them a bowl of refreshing water for their tired feet and pointed out an oak under whose protection they would be comfortable. He brought a snack of morning-baked bread at once and called his wife, Sarah, to take her customary three measures of meal to make a fresh baking. Running to his herd, he selected a young calf, tender and good, which he turned over to his servant to dress for a banquet. When the calf was ready, Abraham brought a generous supply of butter, milk, and bread for the outdoor meal which the "three men" enjoyed under the tree. Seldom has alfresco hospitality been painted more attractively.

Abraham's nephew, Lot, had the privilege of entertaining angels of Jehovah at wicked Sodom, in the hot Dead Sea Plain of the Jordan rift. This region has recently been surveyed by Nelson Glueck, who finds the "well-watered" trait of this area,

mentioned in Gen. 13:10, attested by present-day conditions. The feast served by Lot to the men he had seen coming in the gate of Sodom is described in Gen. 19.

"WAYFARERS' DOLE"

Wanderers like traveling Israel en route from Egypt to the Land of Canaan soon used the scant food supply which wayfarers usually carried in their pouches. Little wonder that they cried in hunger for the well-seasoned meat stews, bountiful vegetables, and fruit of the Nile Delta which even laborers in brickyards and on farms were guaranteed. The day-by-day allotment of quail and manna, which gave the world its first lesson in the folly of trying to hoard foodstuffs, was God's way to silence their hunger pangs.

Pitiful is the desert meal of wayfaring Hagar and her little son, Ishmael, who became father of the wild tribes who dwelt in hairy tents. Sent out to the desert by Abraham when he found the jealousy of Sarah intolerable, Hagar was provided by the Patriarch with bread and a bottle of water, which he put on her shoulder. The Egyptian handmaid and her Hebrew son trudged off into the burning Desert of Beersheba. The food supply they had between them and death was as scanty as that of the fugitive prophet Elijah, hiding from King Ahab, at the Brook Cherith. The "ravens," which brought him flesh to eat daily, are thought by some scholars to be local tribes of hospitable bedouins who took pity on the distraught prophet of Jehovah (I Kings 17:1-7). Elijah had been too discouraged to take with him the usual pressed fig cakes, raisin clusters, olives, figs, cheese, or even bread, which cautious wayfarers usually carried.

Yet desert fare, as T. E. Lawrence writes in one of his *Letters*, can turn out to be quite delectable, that is, if one happens to find an oasis such as he chanced upon in the Wilderness of Zin. This well-watered spot, with acacia trees, brush, broom, and corn, made it possible for him to eat lentils, potatoes, rice, beans, figs, eggs, raisins, Turkish delight, marmalade, and bread. Some of this bounty, of course, had been contributed from stores of "other fellows."

OTHER INFORMAL MEALS IN THE OPEN

Caravan drivers have always carried generous quantities of food in their baggage or in the folds of their garments. As occasion permits, they market at the *sûks* on their route, supplementing customary dried fruits, bread, olives, and cheese with juicy melons or tomatoes. These they relish under fig trees near watering-troughs while their animals rest in the shade. As their coins, so their food.

The best Bible description of fishermen's breakfasts is John's account of the one prepared by Jesus on the shores of Galilee (John 21).

Harvesters' fare is recorded in the Book of Ruth, where we see the young woman from Moab accept Boaz' invitation to join the group of farmers eating their noontime meal of bread dipped in vinegar and parched grain. This menu does not sound inviting to us, but it is satisfying even to harvesters today, who have urged us on Beersheba Desert to share their noon lunch. They parched their grain and enjoyed a delicacy not known in Bible times—delicious, fresh-ground coffee brewed on a tiny table set on the desert floor (illus. 177). This may have been their first meal of the day, as harvesters begin work soon after dawn to take advantage of cool hours. We have seen them "striking" on Tekoa highlands because their foreman would not let them halt to eat even at ten.

Shepherds' meals are carried from their near-by village homes, if the group is tending a community-owned flock. Fare consists of such foods as David liked—fruit, cheese, and bread. Wives pamper the shepherds by giving them choice foods, hoping for good protection for their pet sheep. Shepherds' appetites are always hearty. They gather at noon by well-known watercourses or wells in shady spots; they eat and exchange political gossip while their sheep rest and drink.

Soldiers' rations are suggested by the articles which Jesse sent by his son David to his elder offspring encamped against the Philistines. The boy carried an ephah of grain, well parched, and ten loaves of bread for his brothers; and also a luxury gift of ten cheeses for their captain.

FOOD AS GIFTS

To allow one's food supply to run out in a desert led to embarrassment. When young Saul and his servant were hunting lost asses in the Land of Zuph, they had to consult the prophet Samuel to orient themselves. Looking into their food sacks for a gift to the man of God, they found nothing but crumbs. The servant, however, saved the situation by drawing from his girdle "a fourth part of a silver shekel." This they gave to Samuel as he was returning from blessing his neighbors' food at the high place. The prophet escorted Saul and his servant to his own comfortable guest room and arranged a banquet, with thirty friends participating. Saul was served with the choicest thigh cut prepared by the seer's cook (I Sam. 9).

A picturesque Old Testament story of food brought as a gift tells how tactful Abigail, wife of the churlly herder Nabal, carried generous supplies to the raiding David and his men, who had protected her husband's helpers while sheep-shearing on Mount Carmel. Beautiful Abigail, appreciating David's protection of their industry more than her husband appreciated it, took the chieftain and his 400 men "two hundred loaves, and two bottles of wine, and five sheep ready dressed, and five measures of parched grain, and a hundred clusters of raisins, and two hundred cakes of figs, and laid them on asses" (I Sam. 25:18). The hungry mountaineers rejoiced as they saw the beautiful Hebrew woman directing her young men with their procession of food-bearing asses. The sequel, of course, is that Abigail later became the wife of David.

Another Bible incident involving food as gifts describes how Ziba, deceitful servant of lame Mephibosheth, brought to David and his entourage, when they had fled Jerusalem from Absalom's revolt, "upon two asses, two hundred loaves of bread, a hundred clusters of raisins; and a hundred clusters of summer fruits, and a bottle of wine" (II Sam. 16:1, 2).

What happened when people refused to give food as gifts to bands of hungry warriors, such as Gideon led, is told in Judg. 8. A sordid fate befell the people of Succoth who would not give bread to fainting soldiers.

ENTERTAINMENT IN KHANS

Inns were only for the budget of the well-to-do trader or traveler. From the Parable of the Good Samaritan and from the policy of the Bethlehem innkeeper, we know that money for lodging and food was expected. No ancient rite of hospitality motivated the keeper of a khan. Nor did he trouble to supply much for the coins he received. Ancient lodgers probably dreaded passing a night in an inn as much as travelers today dread such hotels as we have found in some parts. Comfort is hard to find beyond the belt of Jerusalem's "King David," Cairo's "Shepherd's," Beirut's "St. George," Damascus' "Omayyid," or even Amman's little "Hotel Philadelphia" in Transjordan. James H. Breasted records in his journal, quoted by his son in *A Pioneer to the Past*, a low in inns of Bible lands. It was called "The Khan of the Golden River." Conditions in this sordid house on the Upper Euphrates included cooking food over dung cakes, whose smoky flavor permeated the meal, not to mention the particles blown into the pot. No conception can be given of the filth of the caravan drivers who sat on dung piles in the inn-court, drinking from the same buckets they had used for their animals. No wonder the whole place was alive with disease-bearing fleas.

Inns are an older social device than we might think. Genesis 42 and 43 mentions travelers' lodging-places, too flatteringly translated "inns" in the Authorized Version. In one such halting-place, the brothers of Joseph rested on their home-bound trip from Egypt. In another, Moses, his wife Zipporah, and their sons rested on their way from Midian. These places were the crudest sort of shelter, shielding guests from robbers, night winds, February rains, or August drafts. In the Graeco-Roman Middle East of Jesus' time, inns were well established not only in the walled villages near the coast but in the chain of Decapolis cities, such as Jerash and Beth-shan. Jesus had no scruples about using inns if no hospitality or fair-weather outdoor sleeping was available. He saw in them, as Paul did, opportunities for meeting crowds of people with his message. He gave an inn, important place in his Parable of the Good

Samaritan. The Apostle must have frequented many an inn in Ephesus, Philippi, Corinth, and Athens. On his way from Putcoli to Rome, Paul was met at "The Three Taverns" on the Appian Way by friends who had walked out from Rome to greet the weary celebrity who then "thanked God and took courage." From this point on, he no doubt had abundant hospitality from Roman Christians, until he was established in his "own hired dwelling," where he preached unto all that went in unto him teaching the things of the Lord Jesus Christ "with all boldness, none forbidding him" (Acts 28:23).

Babylonia, Egypt, Greece, and Italy had provisions for traders in ancient times.

See illustration 184 of an inn-yard at Nazareth, boyhood home of Jesus.

• "AT MEAT WITH JESUS"

JESUS' USE OF FOODS AS SYMBOLS

The activities and the words of Jesus which have to do with meals give us an insight into the peasant ways of his Galilean people, and into the town and city customs of the Graeco-Roman world of which he was a part. Some of the most significant utterances in the Bible concerning food came from his lips. He summed up all hospitality when he said, "I was hungry, and ye gave me to eat; I was thirsty, and ye gave me drink; I was a stranger, and ye took me in; naked, and ye clothed me" (Matt. 25:35, 36). And he epitomized his own spiritual ministry when he said, "My meat is to do the will of him that sent me" (John 4:3). That "other meat" of inner resources, which saw him through crises and which his literal-minded disciples could so little understand, is the secret of all successful Christian living through the centuries. Again, he defined himself in a phrase which his most ignorant hearers could at least grasp, "I am the living bread." They knew the staff of bread on which life itself leaned in their poor land. And they tried to follow the Teacher's thinking when he continued, "If any man eat of this bread, he shall live forever. . . . He that eateth my flesh and drinketh my blood abideth in me" (John 6).

To command that flat, brown desert stones be made flat brown loaves of bread (illus. 183, bread at Shechem) was a temptation which the peasant and the tent dweller could understand. Stones and bread looked alike. The prayer of Jesus, "give us this day our daily bread," was a challenge by which he hoped to teach them constant dependence upon God, even as they had looked to Him, during the wilderness trek, to send fresh supplies of manna every day. If Jesus were speaking now, he might advise us, "Do not hoard. Share what you have with your brothers, and look to God for tomorrow's supply."

Again, Jesus used terms of everyday foods when he told his friends that they were "the salt of the earth," so essential in flavoring dull menus and in preserving the good; and that their lives were fruits, by which people would judge the sort of tree they were (Matt. 7:16). And doubtless he, like Paul, often quoted the old Hebrew proverb of his people, "If thine enemy be hungry, give him bread to eat" (Prov. 25:21). Thus, by constant dramatic repetition, he taught men not to be anxious what they should eat (Matt. 6:25), or to trust to "bread alone" for their strength, but to live by "every word that proceedeth out of the mouth of God" (Matt. 4:4).

JESUS AND PEASANT FARE

From his own poor boyhood home at Galilean Nazareth, Jesus knew that strength for the carpenter's work came every morning when Mary took, for her baking, "three measures of meal." This custom he later used in his Parable of the Leaven (Matt. 13:33). He shared the family's common meal at evening when all sat on the earthy floor around a large dish, in which savory stew of meat and vegetables was steaming. Like his brothers and sisters, he used his fingers or a bent piece of the flat brown bread as a spoon to dip his share into his small bowl (illus. 182). He followed this custom when observing the Passover meal with the Twelve at Jerusalem in the historic upper room. Tables, chairs, linens, and an array of dishes were entirely out of the picture in the Galilean peasant home. Therefore, the

mother had time to join the villagers laboring in the harvest tasks at the Nazareth threshing-floor, and time to fill her water jars to the brim at what we still see today as the Virgin's Fount, or Mary's Well, beside the busy caravan route (illus. 233).

Breakfasts were so scanty as to be no meal at all. Noon lunch consisted of bread, olives, and possibly fruit, carried in the leather scrip to the cool shadows of a Sepphoris carpenter shop, to a grain field, or to one's place of work under a tree.

JESUS AND NEW TESTAMENT MEALS

By his association time and again with urban folk at their mealtime, Jesus showed his social nature, warm and free from that caustic asceticism which made John the Baptist, his cousin, prefer the wilderness fare of locusts and wild honey. From each of the several dinner scenes in the Gospels, we glean some custom of the ancient Bible lands.

AS GUEST

The marriage feast at Cana in Galilee reveals how Jesus, joining in his family's simple joys, helped provide the deficiency in the refreshments. Huge earthen jars were filled with the pressed juice of the recent local grape vintage. Jesus' presence stamped his approval upon the sanctity of marriage and, best of all, revealed his utter faith in God's power to do all good things for his expectant children. Because of his part at the feast, the wedding guests were able to return home on camels, donkeys, or afoot, with a sense of having had a happy interlude in their daily monotony of toil (John 2).

Matthew's great feast (Matt. 9:10-17) followed the pattern of a more formal dinner-party, after the customs of the Graeco-Roman world of first-century Palestine. Jesus "reclined" at meat (v. 10), and the "publicans and sinners," who were guests, "sat down." The water-color paintings of the devout French artist, Tissot, who lived in Palestine and then set down his impressions of Bible scenes with imagination and accuracy, help us to visualize the banquet scene of Jesus' time. The dining room had one side open to the street, with ad-

justable curtains hanging from lintel or columns. Passers-by could gape in and see who was being entertained. Hence, "when the Pharisees saw it, they said unto his disciples, 'Why eateth your Teacher with publicans and sinners?'" Idlers on the street, looking in, lodged their criticism with companions who were not among the invited guests of the toll-collector at Capernaum.

The formal table was a three-sided piece of furniture with open space left for servants to serve the meal. Guests had couches whose elevated heads were pushed close against the table so that the reclining diners could reach their foods. Hence, John was "leaning back . . . on Jesus' breast," so that he could hear what the Master whispered. Sometimes a two-sided table was used, with small, low tables making foods accessible. Sometimes these tables had pedestals beautifully carved; such we have seen in the Naples Museum and in villas at Herculaneum. Romans and Greeks used this arrangement of couches all around the Mediterranean. They named their dining rooms *triclinia* from these three-sided table-couch arrangements. Prosperous villas had summer *triclinia*, with garden outlooks, and warmer ones for winter. Dining rooms with double couches were *biclinia*. In Jerusalem of Jesus' day, there were two state dining halls, with couches for 100 guests in each. Homes of ordinary folks in New Testament times did not have rooms used exclusively for dining. When meal-time came, a member of the family or a servant would place on the floor low tables or a broad circular mat, within reach of all who would dip from the common dish of hot food.

Dining with a ruler of the Pharisees (Luke 14:1-11), Jesus took occasion to indicate correct table manners. He impressed upon the jostling hypocrites that they should take the seats assigned them by the master of the feast or, at least, should not compete for the highest or chief couch, nearest the host. Paralleling human hospitality with principles of Christian human relations involving a gracious humility, Jesus, in a parable, rebuked those who strove to exalt themselves in the chief place at the marriage feast. The master of

any feast is the one who decides every detail of procedure.

Jesus had a lesson, also, concerning the personnel of invited guests. He pointed out that real hospitality consisted in inviting men and women whose station in life was such that they could not possibly return the strutting entertainment of rich Pharisees. When "thou makest a feast," he said, "bid the poor, the maimed, the lame, the blind: and thou shalt be blessed; because they have not with which to recompense thee" (v. 14).

In *Syro-Phoenicia*, along that purple-impregnated Mediterranean coast, Jesus' foreign hostess showed how the crumbs and fragments of food which guests customarily threw under the table for the family dogs could symbolize that even the unprivileged might share the feast provided for the children. Jesus cured the sick child of this woman of broad faith. Then he went away, admitting that he had a place in his program even for those who were not lost sheep of the house of Israel (Mark 7:24-29).

Dining with Simon the Pharisee (Luke 7:36-50), Jesus had an experience which we can understand only as we realize that his host's dining room had one side open to the street, like that of Matthew at Capernaum. A woman passing by saw that Jesus was present and thus slipped in to place upon his head the costly ointment from her alabaster cruse. The placing of perfume upon the forehead of the dinner guest was the privilege of the host, or of one of his servants, in both Palestine and Egypt. This finesse had been ignored, Jesus told his host. Moreover, the crude Pharisee had neglected to give him the usual kiss of hospitality—the intimate kiss which Judas later used for betrayal—and had neither brought the usual basin of water for the tired and dusty feet of his guest nor ordered a servant to bring it. No wonder the others who "sat at meat," that is, at the elaborate meal, were amazed that Jesus commended the uninvited woman who had intruded upon this gathering for men only and openly chided his careless host.

At *Bethany*, in the garden of Mary, Martha, and Lazarus, Jesus time and again

refreshed himself and his companions under large-leaved fig trees and trellised grape vines, as the good cook Martha brought on the large common dish of simmered stew. Meat, garlic or onions, and spices made the whole atmosphere savory, and plenty of olive oil flavored vegetables from her own garden. Again in Bethany, Jesus dined with Simon the Leper only two days before his final Passover at Jerusalem (Matt. 26:6-13). The extra courtesy Jesus received on that occasion through the ceremonial anointing seems to have spurred the jealous, calculating Judas to his shameful betrayal in the Garden, just across the shoulder of the Mount of Olives from Bethany.

At Jericho, by inviting himself to be guest of Zaccheus, Jesus reversed the usual rite of hospitality, where everything is in the hands of the host of the feast. But rich publican though Zaccheus was, he "received him joyfully" (Luke 19:6). The entertainment in this instance seems to have included overnight lodging, for the word "lodge" or abide is used. Jesus would not have climbed the dark Jericho road at night.

At Emmaus, Jesus broke evening bread with two men whom he met on the road from Jerusalem after his resurrection on the first Easter. He did the remarkable thing of turning his role as guest to that of host (Luke 24:13-31): "it came to pass, when he had sat down with them to meat, he took the bread and blessed; and breaking it, he gave to them." Strangely reminiscent, this, of the record of the Last Supper: "And he took bread, and when he had given thanks, he brake it, and gave to them, saying, This is my body which is given for you." No wonder he became known to the men in the little house at Emmaus "in the breaking of the bread" (Luke 24:35).

As Host

Sometimes Jesus assumed an informal command of situations which put him in the role of host, supplying food. Going through fragrant, ripe grain fields one Sabbath, he let his hungry disciples pluck a few ears and begin to eat. Long before, Ruth the gleaner had enjoyed the parched

grain below Bethlehem, and harvesters on Beersheba Desert today have offered us grain spread out on a canvas tablecloth on the warm grain field (illus. 177).

Informally, again, Jesus became outdoor host on more than one occasion to improvident multitudes who had either failed to take bread with them, being too poor or too far from markets to supply themselves, or had followed the Teacher so long that they had passed their customary mealtime (John 6:1-14). The Passover season was at hand, and the multitude were probably faring up toward Jerusalem when they tarried to have Jesus heal their sick or to watch his gracious ministry. Taking it for granted that the responsibility for feeding them was in his hands, Jesus, after almost teasing Philip as to where they could buy bread for so many, organized the hungry mob into orderly rows on the delightful grassy slopes above the Sea of Galilee, near such fresh-water springs as still flow today at Tabgha. Now they were ready to receive the bounty which appeared after Jesus had accepted the small Galilean boy's lunch of "five barley loaves and two fishes" (illus. 180) and had closed his eyes above them in expectation that God would provide in some manner for the multitude. It is not within our province to discuss the miracle; we accept the fact that Jesus found a way to meet this human need. He does the same today, whether through relief ships sent to starving Europe or through men influenced to open their money srips, as the boy opened his lunch pouch at Tabgha. There is reason in the suggestion of George Lamsa that the real miracle consisted in Jesus' persuading the greedy men in the crowd, who still had the folds of their garments filled with "reserve" food, to share it with their brothers.

It is interesting to compare with this great scene the Old Testament "miraculous feeding" in Elisha's time, when a man from Baal-shalishah brought the prophet, in time of dearth, twenty loaves of barley, some of the first-fruits from his farm, and some fresh grain. From these Elisha saw 100 hungry men eating and leaving fragments (II Kings 4:42-44).

When Jesus and his disciples sat down in an upper room in Jerusalem to observe

their last Passover Feast together, after the manner of all faithful Jews (see *Ritual of Foods*, p. 315), Jesus played the role of host to his followers (Matt. 26:20-29), distributing the unleavened bread and the other items of the ancient feast. After supper he performed an ancient rite of hospitality which was usually done by the servant of the house. Rising from the table, "he took a towel, and girded himself. Then he poured water into the basin, and began to wash the disciples' feet, and to wipe them with the towel" (John 13:4, 5). The artist Tissot has given us a superb depiction of this divinely humble scene, showing the radiant Jesus kneeling to his task, while the indolent disciples look on. For an upper room see illus. 167.

When hosts entertained at dinner in the time of Jesus, they had the basin placed in front of each guest before the meal began, and water was poured from a metal pitcher into the ewer. After the meal, the servant brought small cups of drinking water to those wishing to rinse their mouths and offered a basin again for their sticky hands.

The Shore breakfast for hungry fishermen, prepared by the resurrected Jesus for the discouraged disciples, was the essence of open-air hospitality. Dismayed at getting no haul for all their night of toil in the boat, not only did the men get a catch so heavy that they could scarcely land it, after they had followed the advice of the Stranger standing on the shore; but they were elated to see, as they neared the sandy beach, a curl of smoke rising. This meant that breakfast was cooking. They saw the glow of a little fire of coals, with fish already laid upon it to broil. How appetizing they smelled! Little wonder that even Peter was afraid to call the Lord by name, although he recognized him. The hearts of all were too full for utterance, as they received the fish and broken bread from the hands of him who had supped with them in the Jerusalem upper room. It was Jesus, after breakfast, who finally initiated the conversation, like any good host. No Christian can fail to recall that exquisite hospitality when he sees similar little circles of hungry fishermen eating along those same shores near Tabgha today.

Jesus was a more provident host than the men of his company who were supposed to look after the food. For time and again, as Mark relates, the disciples "forgot to take bread" (8:14).

Jesus inaugurated grace before meals, in the upper room. Paul, too, enjoined thanking God for food (Rom. 14:6). In Old Testament times, thanks were rendered Jehovah at the close of the meal: "thou shalt eat and be full, and thou shalt bless Jehovah thy God for the good land which he hath given thee" (Deut. 8:10).

EVERYDAY FOODS IN BIBLE LANDS

We have already referred to many everyday foods in Bible lands. Let us add a brief summary:

Bread was the mainstay of daily diet. This lacking, nothing was possible. We have recently seen people rioting in Damascus because they could not pay the high prices demanded for bread. In the Bible, there are more than 200 references to bread. The term is sometimes used to mean food of other sorts. To invite a person home to eat bread usually meant more than it sounded.

The traditional bread, the sort resembling stones in the Judæan Desert, was flat, coarse, appetizing when fresh, flabby when a day old (illus. 183). Taking the usual three measures of meal mentioned in Jesus' Parable of the Leaven, the housewife let it rise until its bulk was increased; then, at the proper stage, she made it into flat loaves for her oven or sent it to the community baker's. For the Passover and other religious festivals, unleavened bread was customary.

As far back as art records of ancient Bible lands reach, we have evidence of extensive *dairy business* in early Babylonia. The famous inlaid "milking scene" recovered from Ur of the Chaldees, home of Abraham before his trek to Canaan, shows a milking-shed and men at work on the faithful animals of this rich, low farming country. There was "big money" in dairy business for men "between the rivers" as early as 3000 B.C.

Butter was a delicacy which even poor nomads afforded. With bread, it made a

fine meal. Because, however, it was hard to keep in hot climates, olive oil was frequently substituted for it. George M. Lamsa has suggested that the Aramaic word of Luke 16:6, translated, "oil," is really butter, which was often used as a unit of payment for taxes or bills in areas where climate made it possible for merchants to carry butter in sheepskin sacks.

Cheese from all milk-giving animals was popular.

Eggs, poached in oil, were greatly relished.

Milk was always acceptable. First choice was goat's milk:

... the goats are the price of the field;
And there will be goats' milk enough for ...
the food of thy household,
And maintenance for thy maidens.

—Prov. 27:26, 7

Camel's milk was prized because it soured quickly and could be made into health-giving lactic-acid products such as the long-lived patriarchs enjoyed. We are sure Esau welcomed the "thirty milch camels and their colts" which his brother dispatched as part of his reconciliation gift (Gen. 32) when a fugitive east of Jordan. The *leben* made from milk is one of the favorite and oldest foods of Bible lands. Nelson Glueck, archaeologist, who has consumed gallons of it during his highland explorations, tells how it is made: "... *sheninah* or rich buttermilk comes when a bit of *leben* is added to fresh milk to make it ferment. This turns to *ghaib*, which when shaken violently in a goatskin bag, turns to butter and to *sheninah* buttermilk. The latter is put into little sacks of cloth, the water is squeezed out, and the cheese-like *leben* is rolled into little balls which keep indefinitely—and which save many a life in sections where potable drinking water is unavailable."

Fish was abundant and easily obtained from the Nile, the Jordan, the Sea of Galilee and the Mediterranean. We wonder why wider use of it was not made on tables. It was pickled or salted and carried safely even in hot summer weather.

Meat of sheep, goats, and other animals made the backbone of hospitality. Guests were chided if they came too late to have new-killed meat roasted. Cattle were con-

served for their products, and not killed until necessary. Camels and swine were "unclean" to Hebrews but were used by neighboring people and bedouins, although Egyptians found swine undesirable. Many domestic and wild fowls were eaten.

A prized cooking-oil was rendered from the heavy, fat tails of sheep, which supplied quantities for winter use.

Melons of the watermelon type, and many others, were plentiful and very popular for their refreshing juice (illus. 179). Today at town markets, piles of them looking like cannon balls wait eager customers. No wonder wandering Israel cried for the melons of Delta farms (Num. 11:5). For other fruits, see Flowers, Herbs, Trees, and Other Plants, page 209 ff., and also Viticulture, page 408. Mulberries were enjoyed in Bible times.

Vegetables constituted the main diet of Palestinian and Syrian people in Bible times. Leguminous varieties, such as beans, lentils, and peas, went into many a tasty pottage. Prosperous homes stored reserve grains in huge jars, like those found at Jericho by Garstang, with grain still intact. Fitches, juniper roots, salt-wort, and carob pods were food for outcasts (Job 30:4 and I Kings 19:4). Quite a contrast, these long, dry carob pods, to the fatted calf served the Prodigal Son at his homecoming banquet set up by his forgiving father (Luke 15:23). See illustrations 72, 178, for women and men selling fresh vegetables in Palestine.

Relishes included onions, leeks, garlic, lettuce, all popular with Hebrews and Egyptians. With the paschal lamb every family served five "bitter herbs," which may have been a sort of endive, horehound, or lettuce, possibly a sort of beet, coriander, or bitter aromatic known as *thamkah*. Olives were more a basic food than a relish. One tree may yield as many as 10 or 15 gal. These are beaten off with long poles and their juice extracted in an olive press; for finer oil they are beaten by hand. Both green and ripe olives were put down in brine for future use.

Seasonings included salt, commanded by Mosaic Law for the sacrifices. It was frequently controlled as a government monopoly. Salt was extracted in ancient times, as it is today, from the Mediter-

anean and the Dead Sea, and evaporated in pans. We see such amateur pans near Tyre and Sidon, along the Mediterranean (illus. 181). Spices came in vast quantities, over the ageless caravan routes up the coast of Arabia, or from India overland to Syria. Venerable spice routes, adjacent to reliable springs and to date groves, near Ezion-geber at the head of the Gulf of 'Aqabah helped Nelson Glueck to locate the port of Solomon.

Sweets have always been craved. The honey mentioned in connection with early descriptions of Canaan grew in rocks, carcasses, or hollow trees. "Dibs" of honey were brought as gifts to the prophet Ahijah by King Jeroboam's wife (I Kings 14:3), and to David in exile, when people of eastern Palestine presented him with "beds and basins, and earthen vessels, and wheat, and barley, and meal, and parched grain, and beans, and lentils . . . honey, and butter, and sheep, and cheese." In the food bazaars of David Street in Jerusalem and on street corners of Damascus the candy man is popular. He sells cocoanut and gum arabic and rose-paste sweets by the inch or coiled by the yard, enjoying music broadcast from Cairo as he sells.

"The good things of Egypt" referred to in the Old Testament included not only onions, leeks, garlic, cucumbers, lentils, pumpkins, melons, and various roots, but plentiful fowls, specially fattened oxen, and stews made of pigeon. Quantities of gazelles, goats, and antelopes were roasted and washed down with Egyptian beer and grape juice. Sweets blending honey, dates, nuts, and gum arabic were plentiful. One condiment called *helawi* is enjoyed today by the whole Arab world. It is made of sesame and sugar cane. The food of Egypt is still as plentiful as it is anywhere in the Mediterranean world.

Island foods were based on grain and olive oil. People even in Minoan Crete lived well, if we judge from the variety of cooking pots, saucepans, strainers, and kitchenware found in excavations. The amenities of life were cared for even better than in the roast-meat menus of Greeks in the Homeric period. Palace potters and metal-workers kept the utensils in good repair, as we see in frescoes from Crete.

The olive-press room and storage places for dried figs and grain were conspicuous.

FOODS IN BIBLE LANDS TODAY

Foods in Bible lands today are more plentiful than they have been for centuries, because of the impetus given agriculture by the British administration for a decade before World War II. Increased drainage of swamps, grain and vegetable cultivation for visiting troops shut off from the normal imported supplies, and the energies of both foreign-financed Jewish farmers and well-to-do Arab landowners have helped. Tractors have supplanted many an ox-drawn plough; scientific irrigation is pushing out the ancient camel-propelled water wheels. Factors such as the rotation of crops, availability of superior seeds, high market prices for all foods in the Middle East, and the varying climates of the plains and hilly coastal areas are playing a beneficial role in feeding the hungry in ancient Bible lands. Nelson Glueck claims that if old terraces are repaired, if the ancient irrigation schemes of the resourceful Jordan Valley are restored, and if planting of young trees continues, Iron Age highland sites which were productive of much grain in the twentieth century B.C. may again yield. Millions of bushels are being shipped from eastern Palestine across the Jordan to the west now. With the present high population of Jews, Arabs, and others in Palestine equaling the density of the early Christian period, and with modern scientific agricultural methods just beginning to bear harvest, it looks as if the motherland of faiths will remain able to furnish 98 per cent of her vegetables, 92 per cent of her milk, and 50 per cent of her wheat. She will continue to export food to needy neighbors, such as Greece, instead of requiring Red Cross emergency food for herself, as during World War I.

As to present-day foods in Egypt, they are as abundant as when hungry Israel made her trips south for relief. This abundance is due not only to the untiring toil of Egyptian fellahin and the landowners who almost worship their fields but also to the ever-vitalizing silt from the flooding Nile, which makes possible for

this narrow land three crops of maize per year as a basic food and other items in proportion.

FOOD IN THE RITUAL OF WORSHIP

Almost all ancient Mediterranean peoples engaged in sacrificial religious rites using animals, in substitution for the more primitive sacrifice of human beings. Albright believes that the ritualistic killing of sheep, cattle, goats, and doves began during hoary antiquity in western Asia and became widespread from 3000 B.C. on.

Babylonians offered fish and wild animals, and also domestic animals, like Hebrew worshippers. They commonly sacrificed a black bull in their ritual of temple musicians, says Albright, even as the people of India offered horses with a cosmic symbolism. We must recognize the influence of Babylonia upon the religion of Israel. It is interesting to note that Babylonians placed twelve cakes of meal, dotted with incense, before their gods, as food offering, even as the Hebrews later placed twelve cakes on the altar of Jehovah. Babylonians, like the Jews, had a scape-goat ritual. The ancestors of the Babylonians, the Sumerians, living in the First Dynasty at al-'Ubaid where Woolley says "written history began," fashioned as a wall frieze in one of their temples a quaint dairy scene which at first looks merely like a pastoral decoration. But it proves to be ritualistic. Cows carved in limestone or shell are being milked by men on low stools. Other dairymen strain the milk into large vats. The fleeced skirts of these attendants suggest that they are priest-farmers, getting the milk ready for the mother-goddess Ninkharsog. Milk was the nourishment of kings.

On an engraved shell plaque trimming the famous golden lyre from the Royal Tombs of Ur, there is a butcher-priest carrying a portable altar made of cane. On the altar are choice offerings of a leg of lamb, the head of a boar, and a calf's head. The assistant priest is a regal-looking lion, carrying with stately dignity a graceful jar of wine in a fiber net, and a wide shallow bowl for the libation. This rather whimsical portrayal of foods used in

ancient Sumerian worship almost 5,000 years ago amuses modern beholders; but its intention, far from being humorous, is to draw even the animal into the function of worship. Babylonians always had a great love of animals, as their seals and art reveal (see illus. 174, shell plaque).

Canaanites, in worship cults practiced between 2000 and 1000 B.C., sacrificed animals even more widely than the Hebrews. As we have learned from materials excavated recently at Ugarit (Ras Shamra) in northern Syria, Canaanites and Phoenicians offered bullocks, ewes, lambs, kids, and birds in vast numbers. One Ugaritic text refers to deer, stags, wild bulls, and goats brought as offerings. Albright calls our attention to piles of deer and cattle bones found near temples at Canaanite-occupied Beth-shan and also at Lachish. The Baal and the El of the Canaanites received their full quota of animals slain for cultic meals.

Egyptians not only brought food sacrifices to their gods—which later, under eastern influences, became burnt offerings—but saw that their deceased were surrounded with quantities of foodstuffs for the desirable life coveted beyond the grave. Sometimes models, paintings, or carvings of foods in low relief were features of the tombs. Families were expected to bring fresh food and drinks to the floor of burial places on festive days. For a graphic picture of "the daily meal within the tomb" see *When Egypt Ruled the East*, by Steindorff and Seele (p. 145).

The young monotheistic reformer, King Akhenaton, who ruled Egypt from 1387 to 1366 B.C., inscribed on the foundation stone of his new City of the Horizon of Aton (Amarna) a statement that he had offered to Aton a joyous sacrifice of bull, fowl, wine, beer, incense bread, and every goodly herb. He and his fellow-worshippers of Aton secured their strength after death, they believed, through the consumption, by priests, of foods brought to the altar of Aton.

At altars in the courts of Greek homes, animals were sacrificed while worshippers watched the ascending smoke of their oblation. Yet Greeks inclined more to oracles, to beautiful myths of gods living as supermen, and to lofty philosophical

systems, rather than to a worship involving crude slaughter of animals. Yet the Eleusinian mysteries known to Paul included the offering of sheaves of grain among the secret "things shown" to initiates.

Hyksos temples, such as the one excavated at Shechem showing Egyptian influence, provided for festival cults administered by shrine attendants, whose chambers have been found near the unroofed court.

Romans sacrificed vast numbers of cattle, sheep, and pigs, as we see by the carved fragment from a temple in the Roman Forum (illus. 20). Excavated Pompeii of the first century has revealed small niches in the kitchen near the hearth (illus. 141) where offerings of cake, honey, and other foods were made to the penates, Roman gods of the storehouse. These gifts were brought at mealtime on birthdays, wedding occasions, or safe return from journeys. The Roman lares were also worshiped in the home and at crossroads. These gods were thought to protect the cultivated fields and gave their name to the Roman word for "home." Many an Italian in the time of Paul set eggs where snakes, sacred to the god of healing, Aesculapius, could eat them.

Ugaritic worshipers in northern Syria used food offerings in their worship, according to excavated clay tablets from Ras Shamra. When they dedicated new temples to Baal, they consumed much food in half-religious, half-social gatherings which lasted for days. These gatherings have a great deal in common with Israel's custom of bringing figs, raisin cakes, sheep, grain, oil, and cattle to high places where Levites, or priests, shared in enjoyment of the good things. The mere rising of a new moon or the dawn of a Sabbath was occasion for such feasting.

HEBREW RITUAL OF SACRIFICE

As Christians we are most interested in the Hebrew use of food in their worship. Albright believes that Moses could hardly have omitted from his code of laws provisions for sacrificing animals. For the Hebrews saw their neighbors indulging in such practices and would never have tol-

erated being entirely left out. Hence, they led their animals to the slaughter to invoke divine favor on an enterprise, or to express their thanks to Jehovah for His counsel and protection. By the era of David and Solomon, as many as 1,000 bullocks and 1,000 lambs were brought at one time, together with "drink offerings, and sacrifices in abundance for all Israel." At a solemn assembly, everyone ate and drank "before Jehovah . . . with great gladness," as they contemplated the beginning of the great Temple at Jerusalem (I Chron. 29).

Jehovah came close to the worshipers by sharing the meal they brought to Him.

Some scholars believe that the sacrificial system of Israel antedated Moses and came in through patriarchal sources from Mesopotamia, whose profound influence upon Hebrew religion is daily becoming more apparent. From the Genesis story of Abel's sacrifice of the firstlings of his flock to the Apocalyptic "marriage supper of the Lamb," the whole Bible gives prominent place to foods in Hebrew worship. Food was precious. To sacrifice it to deity was the essence of adoration. To suggest the details of sacrificial ritual here is outside our scope, whether we follow the P, or priestly, sources codified in Leviticus, after the Exile, or prefer the JE source dipping into patriarchal material.

Some of the basic laws, however, were these: Blood and fat were for Jehovah alone, not for priest or worshiper. Blood was early recognized as the fluid of life, even as moderns prize blood plasma for continuance of lives. Beneath the great rock probably used as the altar in the first Jerusalem Temple (illus. 235) and now housed under the Moslem Dome of the Rock, we have seen a great hole, down which blood from sacrificed animals flowed toward the Kidron Valley. Also, the law was explicit about sacrificing only clean animals. Those which had been accidentally killed, or those classed as "unclean," such as camels, birds of prey, storks, ostriches, lizards, and "winged things that go upon all fours," were unacceptable on the altars of Jehovah. Anyone who so much as touched an unclean animal was obliged to go through prescribed ritual. Another specification was that all meat sac-

rificed was to be "salted with salt" (Lev. 2:13). Certain food prohibitions penetrated even into Hebrew domestic meals. Eating "the sinew of the hip which is upon the thigh" was tabooed because the angel who wrestled with Jacob had laid hold of the hollow of Jacob's thigh in the sinew of his hip (Gen. 32:32). No kid was allowed to be boiled in its mother's milk. Possibly this prohibition was in protest against a Canaanite custom.

A sacrifice extraordinary existed in the form of the scapegoat, which was brought to the tent of meeting on the Day of Atonement and, after having the sins of the whole community placed on its head, was turned into the wilderness to die (Lev. 16:20-22).

In addition to the three major historic festivals of the Jews—Passover, Pentecost, and Feast of the Tabernacles—and the minor festivals of Purim, the Festival of Lights, and the five feasts celebrating the institution of the Sabbath, there were numerous other occasions when semi-sacred, semisocial food offerings were made: weanings, weddings, and sheep-shearing times were some of these. Jesus observed these festivals. His admirers urged him to go up to Jerusalem to the Feast of the Tabernacles where crowds might see him manifest himself "to the world." To observe the Passover, the "feast of unleavened bread," Jesus went up to Jerusalem and was arrested soon after this sacred occasion.

Burnt offerings by individuals or groups involved sacrifice from flocks or birds. *Meal offerings* included gifts of grain, oil, or frankincense. Priests were entitled to legal shares, drawn out with flesh-hooks. If they appropriated more than lawful amounts, they were punished, as when sons of Eli took more than their share of what was left over. Even though a family did not afford meat on their own table every day, they brought animals to sacrifice as *peace offerings* when they needed to re-establish harmony with God. We know from the account of the presentation of the infant Jesus in the Temple that poor artisans' families were permitted to bring two turtledoves or two pigeons, one for purification after childbirth and the other as a *peace offering* (Luke 2:22-24).

For the seven-branched golden candlestick which stood outside the veil of testimony, in the Tent of Meeting, and later in the Temple until it was carried to Rome by Titus in A.D. 70, pure beaten olive oil was brought each Sabbath. Also, twelve cakes of finest flour with frankincense on each were placed in rows upon the "pure table before Jehovah" (Lev. 24:6).

In the generations when worship was centralized at Jerusalem and the families went up each year for the feasts, an elaborate ceremonial grew up, involving gorgeously attired priests, strutting rulers, and sacrificing worshipers. The destruction of the Second Temple reduced the sacrificial aspect of Hebrew worship, which had already been sharply denounced by eighth-century prophets stressing justice, mercy, and sincere approach to Jehovah rather than the bleating of sacrificed animals. Early, the prophet Samuel cried, "Hath Jehovah as great delight in burnt offerings and sacrifices, as in obeying the voice of Jehovah? Behold, to obey is better than sacrifice, and to hearken than the fat of rams" (I Sam. 15:22). This sentiment grew until it developed into the protest of Micah: "Will Jehovah be pleased with thousands of rams, or with ten thousands of rivers of oil? . . . what doth Jehovah require of thee, but to do justly, and to love kindness, and to walk humbly with thy God?" (6:7, 8). Jesus, quoting Hosea, told Pharisees who were criticizing his dining with publicans and sinners to go and learn what this meant: "I desire mercy, and not sacrifice."

THE HOLY COMMUNION OF CHRISTIANS

Not only the three major Old Testament feasts involved use of foods, but also the great New Testament ritual of the Last Supper, our holy communion. Jesus, coming to redeem a people who had been accustomed to blood sacrifices, built a bridge of his own sacrificed body by which they passed over from the old covenant of the Law to his new order of love. As the author of the Book of Hebrews says, Jesus sanctified the people through his own blood. The shared wine and the broken bread became intelligible to his people as

he spoke of his broken body and spilled blood. Substituting bread and wine for the Passover foods known to his people since the Exodus—the roast lamb, the bitter herbs, the unleavened bread, the wine—Jesus spanned the distance between Passover and communion. Just as the old Passover had been an offering rather than a sacrificial feast, so Jesus became our oblation, offered for our sins and the sins of the whole world throughout time.

ATTITUDE OF PETER AND PAUL TO FOODS

In the New Testament, we find both Peter and Paul wrestling with food proprieties. On the Joppa rooftop, however, Peter learned that he should not reject, as common, any food which God had made (Acts 11:9). Paul decried the current gluttony of his vomitorium-using Roman Age. Yet, he told his hearers that new Christians

might accept dinner invitations from pagans, provided they did not eat food which had been sacrificed to idols. "Liberty in Christ" was to guide these devout followers; they were to beware of giving "occasion of stumbling" to Jews, Greeks, and Christians. "Whatsoever is sold in the shambles, eat, asking no questions for conscience' sake . . . If one of them that believeth not biddeth you to a feast, and ye are disposed to go, whatsoever is set before you, eat" (I Cor. 10:25-27). Paul saw the whole earth and its products as "the Lord's." One of his wisest bits of advice in re eating, was: "Wherefore, my brethren, when ye come together to eat, wait one for another. If any man is hungry, let him eat at home; that your coming together be not unto judgment" (I Cor. 11:33, 34). Paul had evidently seen "church suppers" of the first century where people ate as greedily as at such occasions today.

ADDITIONAL BIBLE REFERENCES

Note.—As there are scores of allusions to various phases of food in the Bible, see any good concordance under Food, Eat, Meat, Sacrifices, etc.

"Beware lest thou forget Jehovah . . . lest, when thou hast eaten and art full . . . thou forget Jehovah thy God, who brought thee forth out of the land of Egypt" (Deut. 8:11-14)

"She riseth also while it is yet night,
And giveth food to her household"
(Prov. 31:14)

"and breaking bread at home, they took their food with gladness and singleness of heart, praising God, and having favor with the people" (Acts 2:46)

"One man has faith to eat all things: but he that is weak eateth herbs.
Let not him that eateth set at naught him that eateth not" (Rom. 14:2)

"If any will not work, neither let him eat" (II Thess. 3:10)

"having food and covering we shall be therewith content" (I Tim. 6:8)

"To him that overcometh, to him will I give to eat of the tree of life" (Rev. 2:7)

BIBLIOGRAPHY

- Abingdon Commentary, Abingdon-Cokesbury Press, New York.
 Albright, William F., *Archaeology and the Religion of Israel*, The Johns Hopkins Press, Baltimore.
 ———, *From the Stone Age to Christianity*, The Johns Hopkins Press, Baltimore.
 Breasted, Charles, *A Pioneer to the Past*, Charles Scribner's Sons, New York.
 British Museum, *Guide to the Egyptian Collections*, London.
 Broughton, Len, *The Table Talks of Jesus*, Fleming H. Revell Company, New York.
 Caiger, Stephen L., *The Bible and the Spade*, Oxford University Press, Oxford.

- Ellis, William T., *Bible Lands Today*, D. Appleton-Century Company, Inc., New York.
- Glueck, Nelson, *The Other Side of the Jordan*, American Schools of Oriental Research, New Haven.
- Gordon, Cyrus H., *The Living Past*, The John Day Company, New York.
- Hastings, James, *Dictionary of the Bible*, Vol. 1, 2, 4, Charles Scribner's Sons, New York.
- Hayes, W. C., article, *National Geographic Magazine*, October, 1941, Washington.
- Jacobson, David, *The Social Background of the Old Testament*, Hebrew Union College Press, Cincinnati.
- Lamsa, George, *Gospel Light*, A. J. Holman Co., Philadelphia.
- Lawrence, T. E., *Letters*, Doubleday Doran & Company, Inc., New York.
- Mackie, George M., *Bible Manners and Customs*, Fleming H. Revell Company, New York.
- Mann, Thomas, *Joseph the Provider*, Alfred A. Knopf, New York.
- Matthews, Basil, *The World in Which Jesus Lived*, Oxford University Press, Oxford.
- Petrie, Lady Hilda, *Side Notes on the Bible*, Hutchinson & Co., Ltd., London.
- Steindorff, George, and Seele, Keith, *When Egypt Ruled the East*, University of Chicago Press, Chicago.
- Thompson, W. M., *The Land and the Book*, Harper & Brothers, New York.
- Trumpet, Victor, *The Mirror of Egypt*, Marshall, Morgan and Scott, London.

ORNITHOLOGY

The time of the singing of birds is come.

—Song of Sol. 2:12

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INTRODUCTION

BIRD MOSAICS AT TABGHA

Fragments of a chapel floor laid on the shores of the Sea of Galilee possibly prior to 386 B.C. offer an amazingly vital picture of bird life in this sub-sea-level lake section familiar to Jesus and his disciples. For bird life in a given area does not suddenly change, as by a great catastrophe. Witness the current migrations of quails across southern Palestine from the north, as in the time of Moses and his wandering Israelites. Therefore, the Tabgha mosaics of waterfowls and marsh flora near the abundant Heptapegon, or Seven Springs, at the traditional site of the feeding of the multitude have much to tell us about birds of New Testament times. They constitute a charming "motion picture" of ancient bird life.

In 1933 we noticed these precious mosaics lying out in the sun in a field near the Capernaum highway over which Matthew once presided. They were "salted

over" with sand for protection and were guarded by a black-gowned bedouin woman who brushed off the sand with her bare foot to show us the treasures. But returning in 1938, we found that the bird mosaics had been encased in a small chapel erected over the one-time Church of the Multiplying. As a custodian sponged the original floor fragments to bring up the unfaded colors, we marveled at the tiny tesserae, or cubes of varicolored limestone, set in layers of pure lime mortar, below which were layers of coarse mortar and stones the size of a man's hand. In soft red-browns, ochre-yellows, whites, light-reds, and violets dainty but warm, these skillful depictions by an unknown master of some late Graeco-Roman city on the Mediterranean coast thrilled us. Their artist had apparently enjoyed fashioning ducks chattering among oleander bushes; long-legged, needle-beaked herons watching geese snipping red flowers from an unfamiliar bush; and a dove seated on a lotus flower, turning to "answer back" to a proud heron strutting toward it. A snake-

necked swan and a pair of cormorants we saw amid bulrushes, lotus plants, and various thistles, such as we had just been admiring outside on Genessaret Plain. A flamingo giving his water-snake-assailant a sample of his heavy beak was in haughty contrast to a tiny, bearded titmouse swaying on a lotus fruit. A crane, daintily perching on a cylindrical tower inscribed with Greek numerals from six to ten, seemed to guard a meter set to measure the height of Galilee Lake. The forgotten bird artist had also depicted two gorgeous peacocks, with their spotty eyes facing each other across a thistle. The ancient bird lover, a John Audubon of Galilee, had not forgotten to include two showy members of *Francolinus vulgaris*, edible birds, holding a garland between their beaks.

We glowed over the freshness of these winged tenants of the plain which had been preserved through the loving observations of their designer. He had apparently finished them not later than the fourth century after Jesus and his disciples had halted in this region to rest and to watch just such water birds and marsh flowers at Tabgha.

JESUS AND BIRDS

Christ made several allusions to birds, preserved by the Synoptists. Once he compared the little creatures snatching seeds which the hurried sower had let fall along a hard footpath to evil forces snapping up from the hearts of wavering disciples truths they were trying to hold (Matt. 13:4, 19). Again, he referred to small birds lodging in branches of a giant mustard bush (Luke 13:19). Poignantly contrasting his own homelessness to the coziness of bird families, he said, "The birds of the heaven have nests; but the Son of man hath not where to lay his head" (Luke 9:58). Yet Jesus felt at home in God's universe where his Father had concern even for sparrows, five of which were sold for two pennies in the food markets (Luke 12:6); and where even unattractive ravens were provided with food, although they knew nothing about sowing, reaping, or gathering into barns (Luke 12:24). He brought his understanding of bird ways to a climax when he said, as he looked at the majestic

yet pathetic panorama of his unyielding capital, "O Jerusalem, Jerusalem, that killeth the prophets, and stoneth them sent unto her! how oft would I have gathered thy children together, even as a hen gathereth her chickens under her wings, and ye would not" (Matt. 23:37). Jesus had seen mother-hens in his own yard at Nazareth offering such shelter. See illustration 184.

The tragic note of the crowing cock at the trial of Jesus is recorded by all four Evangelists. Roosters sensed the portent of this strident signal which came twice, amid three denials of Peter, in the clammy courtyard of the high priest that Thursday night. We ourselves have been awakened by the shrill crowing of conceited Jerusalem cocks, "cockily" rousing the sleeping city on Mount Moriah. "Cock-crowing time" is as definite a moment here as "early candle-lighting time" among Pennsylvania Mennonite farmers. In fact, many cocks crow three times during the night: soon after midnight, again at two, and on a large scale at four, when laborers are starting to work.

BIRDS IN THE LIGHT OF ANCIENT LAW

Bird sanctuaries, like the one at Oyster Bay honoring Theodore Roosevelt, impress us as humanitarian devices typical of our America. Yet, as long ago as the formulation of the Deuteronomic Code, a bird-conservation edict was formulated. For example, no mother-bird could be taken while she was sitting on eggs or on her young, although her brood might be carried off (Deut. 22:6, 7). To ornithologists this seems inconsistent.

Moses himself appears to have had clear ideas about "clean" and "unclean" birds (edible and inedible groups).

"CLEAN" AND "UNCLEAN" BIRDS

For Israel's physical welfare, which was always a matter of primary concern to the Lawgiver, Moses taught the people not to eat eagle, osprey, gleele, falcon, ostrich, kite, sea mew, owl, pelican, vulture, cormorant, stork, heron, hoopoe, or bat (Deut. 14:11-18). He considered them

unclean and not fit for food. Robert C. Murphy, noted ornithologist of the American Museum of Natural History who has given valuable suggestions for our present section, calls attention to the fact that "eagle" probably should be translated "vulture," related to the lammrgerier. "True eagles of the Old World," he says, "do not eat carrion. On the other hand, Old World vultures are closely related to eagles and are quite unlike our American vultures which belong to another order." He adds, "I do not know why bats were classed as unclean, but certainly not on the grounds that they were scavengers. There are no vampire bats in that part of the world and all the biblical species of bats must have been insect eaters."

Moses had not lived in Egypt without absorbing Nile Valley superstitions which honored to the point of deification such birds as the falcon and the hoopoe. Moses must have seen numerous bird hieroglyphs on stele and obelisk. In the Delta of the Nile he had learned to protect the sacred ibis, the related heron, the gull, and the hoopoe, lest he interfere with the passage of some mortal's soul to its eternal home. Egyptians venerated the latter bird because they felt it eavesdropped on their secrets and would reveal them. Hence our phrase, "a little bird told me."

He also taught a ceremonial use of two birds in treatment of lepers. One was killed and the other dipped in its blood, together with cedar, hyssop, and scarlet matter. The afflicted person was seven times sprinkled with blood spattered by the wings of the living bird, after which the little creature was set free in an open field (Lev. 14:1-7).

Possibly storks were "unclean" because they fed on earthy snakes.

Yet even unclean eagles were accredited with several desirable traits. The greatest compliment paid them was by the author of Ex. 19:4, who pictured Jehovah carrying Israel through the wilderness as an eagle carries its young, bearing it safely over vast distances. Such bird transport had doubtless been watched many times by Moses and his people in deserts of Sinai and Zin. Also, the great recuperative powers of the eagle are suggested by the Psalmist: "thy youth is renewed like the eagle" (103:5). And its terrific speed de-

scribes the gait of David and Jonathan, who were "swifter than eagles" (II Sam. 1:23) and "stronger than lions." The observant face of an eagle featured the cherubim in the vision of Ezekiel (1:4, 10). As he sat among captives by the river Chebar in Babylonia, the four cherubim came in "a stormy wind . . . out of the north."

Writers of Scripture knew intimately the ways of birds, even their tendency to baldness (Mic. 1:16). But we must translate the bald bird of Mic. 1:16 as "vulture," not "eagle." The latter does not tend to be bald. Here are a few allusions to eagles:

"from the end of the earth, as the eagle
flieth" (Deut. 28:49)

"As an eagle that stirreth up her nest,
That fluttereth over her young"
(Deut. 32:11)

"riches certainly make themselves wings,
Like an eagle that flieth toward heaven"
(Prov. 23:5)

"There are three things which are too
wonderful for me,
Yea, four which I know not:
The way of an eagle in the air;
The way of a serpent upon a rock;
The way of a ship in the midst of the
sea;
And the way of a man with a maiden"
(Prov. 30:18, 19)

For eagles in the Graeco-Roman world,
see page 329.

VARIETIES OF BIRDS IN PALESTINE

BIRD WISDOM OF WRITERS OF SCRIPTURE

Bible pages offer detailed glimpses of many varieties of birds. Some 300 species have been found in this small land the size of the state of New Jersey, and, of these, twenty-six are unique there. As Frank M. Chapman points out in *Birds and Man*, about twenty-five of the larger

species are mentioned in the Bible by name. Songsters are not numerous, except for the brief springtime choir of larks, nightingales, cuckoos, finches, twittering blackbirds, and swallows.

In northeastern Transjordan today, birds are so abundant that beauty-loving archaeologists who go there to investigate Bronze Age town sites halt to watch living birds. Partridges are so plentiful in eastern Palestine now that game-loving scientists get a score with every shot.

We are impressed by the ornithology of several Old Testament writers. No finer piece of bird lore has ever been penned than Job's lines describing the habits of the ostrich (39:13-18), the wisdom of the hawk (39:26), and the vulture (wrongly translated "eagle") teaching her young to suck the blood of victims slain on battlefields (39:30). These observations of Job are part of his inspired nature chapters (28-41) which, for descriptive portrayals of animals and the world they inhabit, have never been equaled in the literature of any people.

David, whose roamings over Judaeen hills near Bethlehem and through dangerous mountain passes south toward Gaza brought him close-ups of bird life, worked facile allusions to them into several Psalms. In the eleventh, he compares the soul, seeking refuge from its enemies and finding it in Jehovah, to a bird winging to the mountain to escape the bent bow and the ready arrow on a taut string aimed accurately by night hunters.

Yes, Bible writers knew their birds. Most of their observations still stand the scrutiny of ornithologists. Moreover, they taught that "the birds of the heavens were under the feet of the Creator" (Ps. 8:8), for it was He who fashioned "every winged bird," providing suitable food for each, sending storks to the tall cedars of Lebanon to roost against the upright needles of the flat boughs 6,000 ft. above the Mediterranean (Ezek. 31:6), and teaching pigeons to roost near the homes of men.

DOMESTIC BIRDS

"FATTED FOWLS"

Chickens as such are not mentioned in the Old Testament, unless we include

them in the "fatted fowls" prepared for Solomon's luxury-loving palace tables. Daily consumption included countless game birds, ten fat oxen, twenty oxen "out of the pasture," a hundred sheep, not to mention gazelles and roebucks. This same "unrationed" serving of fatted fowls was observed by Nehemiah when he was cup-bearer in the Shushan palace of Artaxerxes the Persian. When he came back to Jerusalem to repair the city walls, he entertained at his own table, financed independently of the Persian governor, as many as 150 guests—Jews and deputies, as well as foreign visitors—to whom he dished out fatted fowls prepared according to his own favorite recipe, besides one ox per day and "six choice sheep" (Neh. 5:18).

Domestic fowls in a Nazareth inn-yard appear in illustration 184.

According to Alexander Wetmore of the Smithsonian Institution, Egypt knew domestic "common fowls" by 4400 B.C., and geese as early as 3700 B.C., when frescoes were being painted at Meidoum indicating a red-breasted and a white-breasted variety.

Some authorities believe that chickens were first raised in Burma, from which traders shipped them via the Red Sea into Palestine and the west. China claims to have introduced them to her people by 1400 B.C. In Solomon's time, peahens and peacocks were imported by his "navy of Tarshish," which came to port once every three years with cargoes of apes, ivory, and precious birds. Included among these were peacocks, creatures which were as ornamental to the cedar-trimmed palaces of Solomon as they are today on the lawns of Warwick Castle where they preen their eye-dotted trains of feathers. They probably astonished the Queen of Sheba on her memorable trip from Arabia to Jerusalem, and their tongues may have been an ingredient in the entrée served her at state banquets.

DOVES AND PIGEONS

Among the animals of the poorest Palestinian homes in Bible times were doves and pigeons. The hillside house of Jesus at Nazareth sheltered in its walls, under its stairs, or in clay pots on its roof nests of

these gray and white birds. Perhaps his memory of these home birds helped rouse the indignation of Jesus as he saw money-changers and hawkers disposing illegally of animals intended for sacrifices. He was reminded of how Mary had brought a pair of her own turtledoves or young pigeons as she and Joseph came up to Jerusalem in his infancy, to make their ceremonial offering at the gleaming Temple (Lev. 12:8).

Doves and pigeons are not always easy to distinguish. Both belong to the *Columbidae* family. Moses noted marked differences between them and listed them separately.

Commenting on pigeon and dove, in a letter to the authors, Robert C. Murphy notes: "Nobody has ever yet succeeded in making a good ornithological distinction between the terms 'pigeon' and 'dove,' because in their roots these are exact synonyms. In practice we sometimes speak of the larger forms as pigeons and the smaller as doves, but there is no consistency in this. The British, for example, nearly always say ring dove, stock dove, and rock dove for the three largest species of their islands and of western Europe. I doubt very much whether the biblical translators had any distinction in mind, and it is not unlikely that only a single Hebrew and a single Greek word appears in the original text."

From the beginning of Bible history, doves have been used as messengers (Gen. 8:8-12). Pigeons have been called the "special-delivery service of the Middle East." Doves certainly proved more successful than the raven of the ark story, which found so much to feed upon when it was sent out from the flood-stayed craft that it never did return. The dove bearing the olive twig proved a messenger of hope. But the ugly raven may have redeemed the reputation of its kind in the ministry to hungry Elijah at the Brook Cherith, unless these ministering ravens (I Kings 17:4-6) were a tribe of wilderness men, as some scholars believe.

In fertility cults practiced for centuries in every land where the Bible was developing, the dove was a favorite symbol, ornamenting temple and statues of Astarte, Venus, and many a sensuous goddess of

the earth. Illustration 238, showing doves flying from the windows of a Canaanite Ashtaroth shrine at Beth-shan (13th century B.C.) on the Plain of Jezreel at the Jordan Valley entrance, suggests Isaiah's phrase about doves "to their windows" (60:8), although ornithologists translate as "pigeons" these cote-seeking birds.

Jesus paid doves their greatest compliment when he urged his disciples to be as wise as serpents but as "harmless as doves" (Matt. 10:16). Perhaps, as he sat teaching on a Galilean mountainside, the crowds could see doves fluttering above some peasant's home, even as they could see serpents pulling themselves through the stony fields.

SPARROWS AND SWALLOWS

The sparrow and the swallow are another little domestic pair honored in Scripture. They need no greater praise than that of having furnished the Psalmist with a symbol of Israel's restless longing to worship in the Temple, whose altars provide for the sparrow a house and for the swallow "a nest for herself, where she may lay her young" (Ps. 84:3).

One of our most beautiful experiences in several summers of Palestine travel bore out the accuracy of the Psalmist's observation about swallows and sparrows: they nest in towers of worship centers and about the very altars, which are easily accessible through ever-open doors. We had gone up into the belfry of the Church of the Nativity at Bethlehem to photograph the Field of the Shepherds framed by the Greek bells in this ancient basilica begun by Constantine and Queen Helena in the fourth century A.D. Just as we were about to snap the picture, a nervous mother-sparrow whose nest was up among the Bethlehem bells hopped onto the rope, as if she were about to sound an alarm against the invaders. She had priority rights there, she insisted. But the result of her motherly alert is the remarkable illustration 185. We might have waited vainly, for years, to pose such a shot. Robert Murphy, looking at this picture, is inclined to classify our bird as *Passer domesticus biblicus*, the Palestinian house sparrow.

GAME BIRDS

FOWLING METHODS

Ancient Palestinians were not so much interested in hunting as were Assyrians and Egyptians. However, they did go in for fowling small birds. Job records four ways of trapping (18:8-10): snares, nooses, nets, and concealed traps. Sometimes fowlers hung cages of songbirds on trees daubed with bird lime, while they themselves lay concealed awaiting the snared prize. A snare was merely a trap made with noose-cords.

This way of fowling birds provided many images to Bible writers, who felt "cords of Sheol" and "snares of death" round about them (Ps. 18:5). Wicked men were "snared in the work of their own hands" (Ps. 9:16), and nations were taken captive in nets they had laid to snare others (Ps. 9:15). David, advising men to flee to Jehovah for refuge, as birds fly to mountains to escape hunters, warned them that Jehovah would "rain snares" upon malicious plotters (Ps. 11:6). Jesus admonished worldly Jerusalemites against judgments of Jehovah which would come as suddenly as snares closing about birds (Luke 21:34). This picture he well knew from Psalm 91 memorized in his boyhood: "God . . . will deliver thee from the snare of the fowler. . . . He will cover thee with his pinions."

PARTRIDGES

Hunting of these mountain birds is alluded to by David, addressing King Saul (1 Sam. 26:20). This shepherd of Bethlehem had hunted partridges and tasted their delicious eggs, for he knew where their nests were hidden, low in tufts of grass.

Jeremiah, prophet of highland Judaea, was familiar with the custom of the sweet-voiced mother partridges who gathered about them the confused fledglings of neighbors' broods (17:11).

QUAILS

Quails, together with pigeons and partridges, were always "clean" food among Hebrews. The famous quail narrative of Ex. 16 (see p. 360) is verified by Major

C. S. Jarvis, one-time military governor of Sinai, who watched the unfailing autumn migrations of these birds coming from corn fields of Rumania, Hungary, and southern Russia across the Mediterranean to Africa. Heavy with fat, the overconsumption of which brought ill effects to gormand-cxiles during the Exodus, the quails fall exhausted today in great quantities on the shore near Bardawil Lake and on the border of Egypt at the southeast corner of the Inner Sea. This natural phenomenon led Jarvis to put in his case for a northern Mount Sinai, at Gebel Hellal, instead of the traditional site in rugged southern Sinai Peninsula.

Sinai Arabs today and those living along the coast feel that Allah sends these rich birds for their food. They have two ways of trapping them: by a large "trammel net," says Jarvis, stretched between 12-ft. poles; and by a hand net 1 yd. square, drawn like a sack over a bush where weary quails are likely to rest.

From Sinai alone, as many as 50,000 quails per day are exported to the tables of France, Italy, and England in normal times. Little wonder that the government of Egypt has enacted restrictions to prevent extinction of these choice game birds which have blessed their land for more than 3,500 years. Nets may not be placed close to the shores where the arriving birds land, or within the area twenty-five miles east of Port Saïd.

WILDERNESS AND WASTE-LAND BIRDS

Authors of our Bible knew well the vast waste sites of vanished cities which once ruled the world. In some of these, Isaiah, Job, and Zephaniah had heard, or vividly imagined, the terrifying cries of birds haunting awesome shambles—places whose utter demolition by war and earthquake and pestilence really anticipated the blitzed areas of a "civilization" which came twenty-five centuries later.

Isaiah, foretelling the fall of mighty Babylon whose merchants had gripped world trade, said that its elaborate palaces would be reduced to mere hide-outs for the ostrich (34:13), and for the tan-feathered bittern, with its wailing, night-rending boom rising from deep marshy waters.

Zephaniah used the same figure to portray the desolation of Nineveh, whose proud capitals would tumble to the ground and be stepped over by pelicans, bitterns, and "all the beasts of the nations," while passers-by hissed at the sight (2:14, 15).

David, in a despondent mood, compared himself in old age with a homely pelican (Ps. 102:6). The designers of early Christian iconography were not good ornithologists when they suggested the emblem of the pelican "feeding the young by blood from its own breast, as Christ nourishes the Church with his blood." For, says Robert C. Murphy, "there is no truth in the legend. The story arose because the Levantine pelican has, at the breeding season, a red nail or hook at the tip of its bill; and when the bird stands with bill pressed against its breast, it gives the fanciful appearance of having torn its own skin, so that the blood dyes its feathers."

And if we would follow further the thought of Scripture writers about wilderness and waste-land birds, we must include all the owls—little owls, great owls, and the horned ones. David and all the open-air-minded seers of Israel, who walked in the moonlight through their significant country, knew well the hoots of owls. Isaiah featured these birds, together with evil kites, wolves, jackals, and goats, in his picture of ruined Babylon.

Greeks thought better of owls, as we shall see (p. 329). They made these birds companions of the wise Athena, even as they associated the eagle with Zeus and the peacock with Hera.

PALESTINE AS A BIRD-MIGRATION PATH

The narrow land bridge connecting African Egypt with hinterlands of Asia Minor and valleys of Mesopotamia has been useful, since prehistoric times, to birds and to men moving on to restless conquests. Storks have long been popular migrant birds. Their name in Hebrew, *hasidah*, meaning "kindness," comes from the beautiful family life among these white, high-standing birds. The mother-stork cares gently for her young. She is mated with her partner for life and helps him repair their nest when they fly back

to their home among the giant cedars of Lebanon. Ever since early Bible times, storks have been migrating from inner Africa across the Red Sea, tarrying in Palestine to feed on small water animals along the deep Jordan Valley and the Sea of Galilee before flying on to Europe. Jeremiah (8:7) referred to the canniness of the stork in knowing "her appointed times." We wonder if he ever had the thrill of seeing these graceful birds flying out from the green cedars toward the blue Mediterranean.

An enjoyable account of birds in the "Jordan migration corridor" appears in *Down the Jordan in a Canoe*, by the Rev. R. J. E. Boggis. He indicates the preference of birds for this stretch of 200 miles, where fresh water is available and insect life is plentiful, in contrast to the Mediterranean course. He claims that forty-five species use the corridor between the Dead Sea, whose lonely shores encourage birds, to the Lake Huleh section at the source of the Jordan, where more than 100 species live, including waterfowls, storks, cormorants, pelicans, buzzards, herons, and kingfishers. He states that twenty-three sorts of birds are peculiar to the Jordan Valley. Among these are two owls, a dove, a starling, a thrush, two larks, a martin, the striolated bunting, and six warblers.

Swallows, also, are migratory birds in Bible lands. Flocks numbering as few as thirty to fifty fly across to Africa from northern Europe as soon as cold weather begins; these are wise Mediterranean travelers.

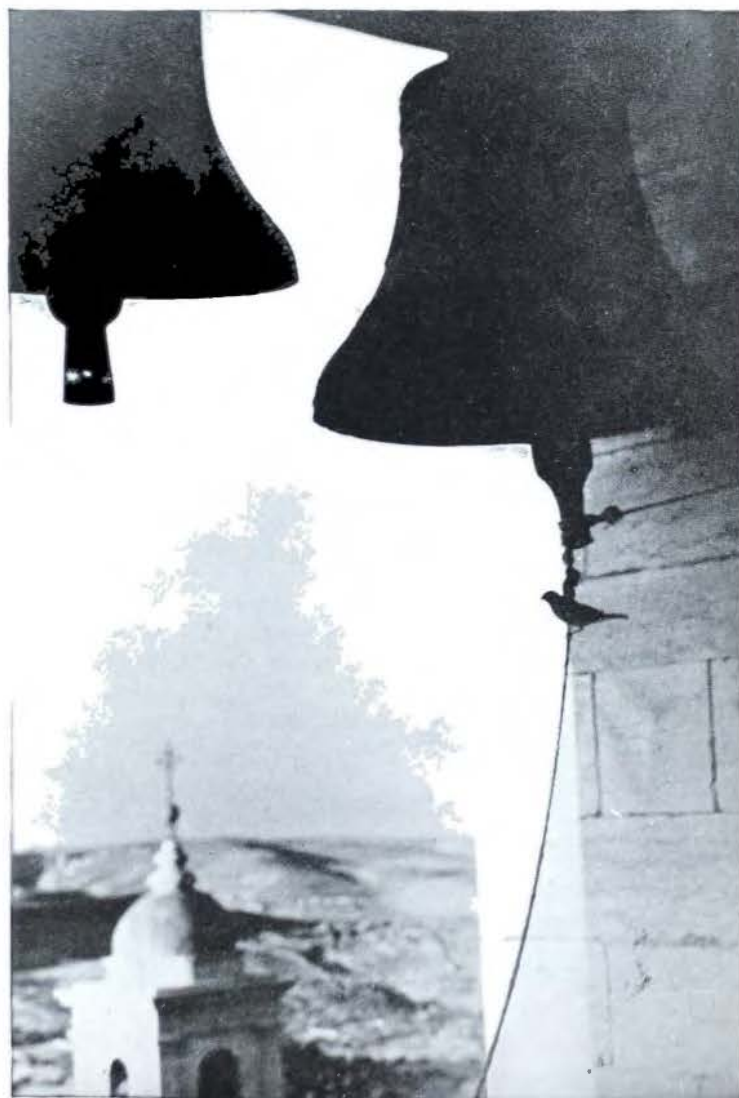
The appearance of cranes and immigrant doves from Upper Egypt was welcome to people of Bible lands each spring. European herons—blue, white, brown—came each autumn to the Jordan Valley, seeking mild winters among sweet marsh grasses. Emil Ludwig, in *The Mediterranean*, queries whether the sea acts as a barrier or a bridge. He notes how the birds of passage use every bit of projecting earth between Siberia and Egypt to help them on their way.

BIRDS IN EGYPT

Ornithology of Egypt reveals a similarity between birds of the marshy Nile Delta



184. Chickens and turkeys in a Nazareth inn-yard.



and Valley and those of Palestine's lake lands discussed above. Egyptians loved to go duck-hunting *en famille* in their tangled papyrus marshes, as we see in the lively painting by H. M. Hergot, reproduced in the *National Geographic Magazine*, October, 1941. While small herons are held as decoys by his little boy, the father hurls wooden boomerangs at the helpless ducks starting up from the papyrus fringe along the river. Mother sits in the reed boat holding the spare boomerangs and keeps an eye on small sister, gathering water lilies from the marsh.

RELIGIOUS ROLES

Birds played a major role in the religious symbolism of mighty Egypt. The chief deity, Ra the sun-god, had as a son Horus, the falcon or sparrow-hawk, a well-known member, along with Isis and Osiris, of the Nile trinity. Just as the goddess Hathor took the earthly form of a cow, and just as the Memphite Apis was depicted as a bull, so Horus, the hawk divinity, was revered by several important cities of Egypt. The sun-god himself often took the shape of the wise-eyed hawk, surveying everything on earth. The giant solar disc on his head resembles the electric magnifying mirror on the head of a modern throat specialist. In jewelry, Horus was a favorite emblem (see pectoral, 149). Peasants believed that the glorious sun, on which their very life depended, must be a falcon flying across the sky from east to west. In his aspect as sun-god, the falcon Horus, "son of the sun," exercised wide influence over religious concepts of neighboring Hebrew people, whose prophets spoke of "the sun of righteousness, with healing in his wings"; the late James H. Breasted pointed out this fact in *The Dawn of Conscience*.

The goddess Mut of Thebes was represented in art by a vulture.

Four Hebrew Psalms refer to living "in the shadow of the wings of the Almighty" (17:8; 36:7; 57:1; 63:7). And Palestinian artists, fashioning ivory panels for chairs in the palace of Israel at Samaria, carved designs of the righteous sun-god of Egypt. We wonder whether the winged creatures known to Isaiah as cherubim may have been a carry-over from the mystical, winged

symbols seen by Hebrews during their dreary sojourn in Egypt and remembered down to the time of the prophets. Job, as keen-eyed as a hawk himself, set down clearly the chief trait of the sacred falcon: his bulging eye, beholding the world, yet fails to plumb the mineral wealth tucked into deep mines by the generous care of Jehovah (Job 28:7).

All of us who have watched the prophylaxis of the hot Egyptian sun and its boost to the several annual crops of the watery fields can understand why the sun-crowned Horus-hawk was so important a national god.

Seeking symbols to express their dominant belief in immortality, Egyptians fancied their king, Pepi, for instance, ascending to the sky with the face of a hawk and wings of a goose. In the Field of Offerings, to which this pharaoh ascended, the Imperishable Stars flew like swallows, said Breasted. Two female vultures with flowing locks and dangling breasts attended the ascending Pepi as nursing mothers.

Vultures under the name *nekheb* were sacred to the commercial city of Eileithiaspolis. And the storklike *ibis* was for Egyptians the embodiment of the god Thoth. As we have indicated, Moses respected the ibis and forbade its killing.

Recognizing in soaring birds powers higher than their own every-day activities, ancient Egyptians pictured the soul of a departing human life as a little bird-man, the *ba*. On many a wooden mummy case we have seen the *ba* with a woman's or a man's head and with human arms uplifted in adoration of a giant falcon balancing the sun-disc on his feathered head. Some of the finest animal depictions out of ancient Egypt were in the form of such perfectly poised falcons.

In the royal regalia of King Tut-ankhamun in the Egyptian Museum at Cairo, we have seen the young ruler's reverence for the vulture, worn on his headdress twined with a cobra (illus. 154). These two animals formed the emblem of Upper and Lower Egypt, united under one ruler. Religious beliefs and jeweler's art were ever blended here. And into the realm of public sanitation deified birds stepped. For the common vulture known as "Pharaoh's chicken" was so important in garbage dis-

posal that one king established a death penalty for anyone killing this unsavory bird.

The ostrich apparently had no religious significance in Egypt, but it was important in the standard of living. For at court in this hot climate, huge ceremonial ostrich fans, whose handles were covered with gold reliefs of ostrich-hunting parties, were popular. The ostrich fan of Eighteenth Dynasty Tut-ankh-amun is one of the miracles preserved in his royal tomb for more than thirty centuries. It was removed to the museum without disintegration of its delicate fibres and has been gently hidden away for the duration of a war more widespread than the conquering mind of Egyptians ever dreamed possible.

The blending of religion and culture brought birds onto deep-cut obelisks. At Heliopolis, for example, we have seen several hawk hieroglyphs relating the tale of Senwosret I, "son of the sun, the golden Horus, living forever"—the Senusert who erected this obelisk to stand in front of the Temple of the Sun.

Pictographs of birds in Egyptian hieroglyphic writing stood for our letters, *a*, *w*, and *m*, for example.

Seals, or cartouches, of several of the greatest pharaohs incorporate a falcon or an ibis.

IN DELTA GARDENS

The exotic Zoological Gardens at Gezira, suburb of Cairo on the east bank of the Nile, have delighted our eyes and enabled us to see many of the brilliant birds whose family trees go back to ancient times. And even more lovely than these confined birds, including pink *flamingos*, are graceful white *herons* stepping daintily among the slender green blades in rice fields of the Delta, flushed pink with sunset.

Everyone who experiences the luxury of traveling 1,000 miles up the Nile in a houseboat sees most of the birds familiar to Egyptians on the wide, muddy Nile in the era when Hebrew slaves were toiling in gardens and fields. The top-heavy *pelican*, dipping his meals from the stream; the top-knotted *hoopoes*; the imperturbable *kingfishers*; flocks of wild geese flying into a sunset behind a fringe of tall palms;

saucy sparrows and wagtails perching on masts and decks of feluccas—these are the ageless pageant of Egypt's bird life. Little wonder that owners of garden villas along the Nile kept bright pets caged near their lotus-columned courtyards.

And south of Egypt there were colorful African birds referred to by the Hebrew prophet Isaiah, who spoke of "the land of the rustling of wings, which is beyond the rivers of Ethiopia" (18:1). He had probably heard of the marvelous beauty of these birds of equatorial east Africa, from traders plying along the Red Sea coast and bringing their wares and their ideas into limited Palestine. In fact, Isaiah, in his very next verse after the bird comment, mentions boats—papyrus vessels, carrying "ambassadors by the sea" to far-off countries (18:2).

THE GRAECO-ROMAN WORLD AND ITS BIRDS

Greeks and Romans alike venerated any bird which nested near a temple.

IN AUGURY

The main interest for Romans in birds lay in their auguring future events satisfactorily. The determining of auspiciousness for state undertakings or military expeditions in Rome and Athens was conducted by augurs appointed for life. The advice of these men, after they had meticulously observed details of bird flights across a given area of the sky or had noted their manner of feeding, might not legally be disregarded. For prior to the fourth century B.C. and up until the fourth century A.D., reading the will of the gods by bird augury was popular. In Rome, signs seen left of the hooded augur on his hilltop were favorable; those on his right were ominous. In Greece, the directions were reversed for good and evil. An augur held in his hands, actually, the destinies of empires and their gullible people. Even election boards consulted the augurs. Julius Caesar and Augustus would not move a step without their consultation. Augurs' signs were called "auspices." Hence our phrases, "auspicious" occasion and "favorable auspices."

BIRDS AND GRAECO-ROMAN BANQUET TABLES

Like people of Palestine and Babylonia, Romans and Greeks gormandized on "fatted fowl," including swans, geese, and ducks. Peacocks—especially their brains and tongues—made delicious entrées.

Birds in cages made popular banquet decorations. As pets, many species were known in early times. Greeks of the fifth century B.C. had already been introduced by the satirizing comedies of the playwright, Aristophanes, to *nightingales*, *jackdaws*, *eagles*, *peacocks*, and a host of other feathered creatures strutting about in caricature of their familiar friends. The *Stork* comedy was especially popular. "Bird-writers" probably leaned heavily on the ornithology of Aristotle, whose observations on bird life were perhaps 60 per cent correct—not a bad record, for a scientist living in the era of the Hebrew Nehemiah.

Romans included in their gala processions rare talking birds brought from far-flung conquests by triumphant generals. These "circus" parades, popular throughout the Graeco-Roman world from Alexandria to Rome and Jerash, and even to Athens and Jerusalem, delighted the simple citizens who knew no other recreations than those provided by the state. It tickled their fancy when they saw fluffy, swift-footed ostriches drawing chariots through their streets to amphitheater or arena.

BIRDS ON COINS AND SEALS

Our best pictures of Graeco-Roman birds are in such mosaics as we have already described (see p. 320) and on silver coins. Greeks so closely identified their goddess Athena with the owl that as early as c.500 B.C. their Attic drachms and tetradrachms carried large-eyed owls, together with berried sprays of the olive. The latter had been specially created by Athena, they said, as her gift to the "violet-crowned city." Similarly, a storm-loving eagle, special messenger of lightning-loving Jove, appears on silver staters of the city of Elis in western Greece, from the fifth through the second century B.C. Some of these depict graphically the shaggy head of the eagle; some, the eagle rending a hare;

others, eagles with extended wings or with pinions folded in repose. These ancient numismatic eagles compare favorably with those on American half-dollars today.

Egyptian Ptolemies stamped a storm eagle on coins of 316 B.C.

The flying dove is beautifully stamped on silver staters minted in the fourth century B.C. by the Dorian Greek city of Sicyon, rival of Sparta, in the state of Argolis. To Greeks, the dove symbolized Aphrodite, goddess of love throughout the Mediterranean world. Doves also played a role in the oracles of Jupiter. According to a myth, two black doves flew from Egyptian Thebes; one lighted in an oak grove at Dodona in Epirus, indicating that a place of prophesying should there be established; the other flew to Ammon in the Oasis of Libya for similar oracular purpose.

On intaglio seals cut in gems, Greeks living in the island of Melos c.600 B.C. carved with consummate art, a bird carrying a snake, to symbolize the triumph of powers of the air over the menial sordidness of earthly creatures. A superb example of the Greek, Roman, and Etruscan flair for gem-seals is now housed in the Metropolitan Museum of Art, which opened to the public late in 1942 the Evans and the Beatty collections of ancient gems. For example, quails are incised in carnelians in the Graeco-Roman period of c.450 B.C., and delicate herons are cut in all-silver seal rings of this same period. These herons, poised on one leg, demand admiration for their designers.

But, of course, the consummate art bird of Greece was the stately eagle carved by the master Phidias in the most famous statue of the golden age of Greece—Olympian Zeus in ivory and gold, enthroned superbly.

MESOPOTAMIAN BIRDS

Assyrians and Babylonians indicated in their art a lively interest in mighty birds of prey, by which they symbolized their devouring of small neighbor nations as Nazi Germany devoured Holland, Belgium, Czechoslovakia and other victims thousands of years later. People of Palestine regarded their oppressors as preying birds. Ezekiel, for example, referred to the

king of Babylon as a "great eagle" with powerful wings and "long pinions, full of feathers, which had divers colors"—an eagle whirring to carry off the young twigs of the cedars of Lebanon to "a city of merchants" (17:2-4).

The double-headed eagle, claims Sartell Prentice in *The Voices of the Cathedral*, was an emblem of Lagash, ancient Babylonian city. It was also a helper of the Mesopotamian hero, Gilgamesh, who subdued monsters in most ancient lore, even as St. George in later Mediterranean legends. We have in our personal collection a Babylonian cylinder-seal from c.1600 B.C., in whose design an eagle is incised, together with a star and a serpent.

Even clumsy bulls and lions were given wings in Assyrian art, as they graced palace stairways or decorated rooms on blue-glazed tile panels. They looked like four-legged beasts of prey, about to swoop on their loot. Assyrian artists themselves were not always sure whether they were portraying vultures, hawks, or eagles. Their chief concern was to turn out a creature unlimited in rapacity and in ability to "go places."

BIRDS IN EARLY CHRISTIAN ART

Artisans of religious art among the first Christians who dared pictorialize their faith at all fashioned several bird-symbols of the new religion. We go time and again to the Roman catacombs of S. Sabastiano and of S. Callixtus near the Appian Way.

There we find on damp walls frescoes made in the second and fourth centuries A.D., glorifying a peacock as a herald of immortality; a dove, symbolic of God's spirit; a pelican, denoting tender care of parent for offspring and suggesting the nourishing of the Church by Christ; and a phoenix, marking the renewal of Christian energy in spite of devastating discouragements.

In medieval cathedrals of France, it is not unusual to see *bitterns* carved as symbols of desolate Nineveh; or fabulous *griffins*, half eagle and half lion, guarding the sacred treasures; or doves, denoting spiritual aspiration and Christian activity. In the Lyons Cathedral for many centuries an eagle featured a certain "Ascension" medallion in a jeweled window; the ability of this soaring bird to gaze unblinded at the sun was suggested.

From the age of Constantine on to our own the eagle has in Christian iconography stood for John of Patmos, who was permitted to gaze through the clouds and behold "the Son of man," whose voice was as the sound of "many waters." The eagle also spoke to Christians of the ascension of Jesus.

Hanging from many a Coptic or Armenian cross in Palestine or between the links of lamps in ancient churches of the Middle East are ostrich eggs, symbolic of the watchful attitude of both male and female toward their nest—despite the comment of Job to the contrary—and of Christ's care for his followers.

ADDITIONAL BIBLE REFERENCES

"and the heron after its kind" (Deut. 14:8)

"Strong is thy dwelling-place,
And thy nest is set in the rock"
(Num. 24:21)

"The wings of the ostrich wave proudly
. . . she leaveth her eggs on the earth,
And warmeth them in the dust"
(Job 39:13, 14)

"though thy nest be set among the stars"
(Obad. 4)

"The wind was in their wings . . . wings
like the wings of a stork" (Zech. 5:9)

"His eyes are like doves beside the water-
brooks,
Washed with milk, and fitly set"
(Song of Sol. 5:12)

"Like a swallow or a crane, so did I
chatter" (Isa. 38:14)

"By them the birds of the heavens have
their habitation;
They sing among the branches"
(Ps. 104:12)

"As a bird that wandereth from her nest,
So is a man that wandereth from his place"
(Prov. 27:8)

"If I take the wings of the morning,
And dwell in the uttermost parts of the
sea;
Even there shall thy hand lead me"
(Ps. 139:9, 10)

"the stork in the heavens knoweth her
appointed times; and the turtledove and
the swallow and the crane observe the
time of their coming; but my people know
not the law of Jehovah" (Jer. 8:7)

BIBLIOGRAPHY

- Beza, Marcu, *Lands of Many Religions*, J. M. Dent & Sons, Ltd., London.
 Breasted, James H., *The Dawn of Conscience*, Charles Scribner's Sons, New York.
 Chapman, Frank M., *Birds and Man*, Pamphlet 115, 1943, American Museum of Natural History, New York.
 Egyptian Museum, Catalogue, Cairo.
 Encyclopedia Britannica, "Birds" and "Ornithology."
 Jarvis, Major J. S., *Yesterday and Today in Sinai*, Houghton Mifflin Company, Boston.
 Jennison, George E., *Animals for Show and Pleasure in Ancient Rome*, Manchester University Press, Manchester, England.
 Metropolitan Museum of Art, *Ancient Gems* (1942)—the Beatty and Evans Collections, New York.
 Porter, Gene Stratton, *Birds of the Bible*, Methodist Publishing House, New York.
 Prentice, Sartell, *The Voices of the Cathedral*, William Morrow and Company, Inc., New York.
 Schneider, Alphonse M., *The Church of the Multiplying of the Loaves and Fishes at Tabgha on Genessaret*, Alexander Ouseley, Ltd., London.
 Thompson, D'Arcy, *Glossary of Greek Birds*, Oxford University Press, Oxford.
 Thompson, W. M., *The Land and the Book*, Harper & Brothers, New York.
 Ward, John, *Greek Coins and Their Parent Cities*, John Murray, London.
 Weigall, Arthur, *The Life and Times of Akhnaton*, T. Thornton Butterworth, Ltd., London.

PROFESSIONS AND TRADES

Jesus answered them, My Father worketh . . . and I work.

—John 5:17

Introduction

Attitude of People in Bible Lands to Toil
The Bible as a Book of Workers
Slave and Free Labor

Professions

Astronomers
Physicians, Surgeons, Apothecaries
Public Officials
Religious Leaders
Prophets
Priests
Scribes and Lawyers
Pharisees and Sadducees
Rabbis
Ministers and Teachers

Engineers

Trades

Barbers
Boat-builders
Building Trades
Brick-makers and Bricklayers
Carpenters

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Metal-workers and Miners
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Miscellaneous Workers

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INTRODUCTION

ATTITUDE OF PEOPLE IN BIBLE LANDS TO TOIL

The workaday world tuncs up early in Bible lands. We have seldom wakened without a sense that life is already astir all about us, as people take advantage of cool hours for hard tasks. We have come awake to the cheery rhythm of men and boys hammering in coppersmith stalls of Damascus; or of boatmen crying out at Sidon; or of Jerusalem burden-bearers shouting people out of their way as they staggered under hampers of grapes. Camel drivers have always started the giant hulks of their soft-coated caravan moving before daylight. At three in the morning, walking out to Gethsemane, we have been almost

crushed against the valley wall by such a moving fleet. There is a mother at Tiberias who, under our window, seems to have been rolling out her large flaps of bread on the roof all night. A father is picking up his trowel to walk into the next town to lay a foundation. Girls are already returning with dripping water pots on their heads. So it was in Bible times in Bible lands. So it is today, despite modernizations.

There is a sense of happy well-being about the tasks of morning in the ancient East—even though nobody admits a taste for labor in these apathetic countries. Noon will bring a three-hour siesta. Night will see cessation of tasks. But again when "morning cometh," it brings renewed energy. As the Psalmist said, commenting on the rising sun,

Man goeth forth unto his work
And to his labor until the evening.
O Jehovah, how manifold are thy works!
In wisdom hast thou made them all:
The earth is full of thy riches

—Ps. 104:22-24

The Ten Commandments stressed not only resting on the seventh day but laboring the other six (Ex. 23:12). Nehemiah's wall-building public-works project showed what happened when "the people had a mind to work" (4:6). Countless are the references to the trades of people's fingers, toiling with flax, cunning in goldsmith's craft, clever with embroidery. Paul was always urging men and women to labor with their own hands (I Thess. 4:11), and thus to avoid the evils that come with idleness. Industriousness found its way into one of his key teachings, "We are . . . created in Christ Jesus for good works" (Eph. 2:10). "Workers together with him" was the picture which Paul, the tent-maker of Corinth, wrote in his second letter to his Christian friends in this busy city. To Timothy his fellow-toiler in the gospel he wrote, "Present thyself approved unto God, a workman that needeth not to be ashamed." The quality of Paul's tent cloth at the loom helped him to be exacting in the technique of Christian apostleship. Paul had no patience with those that take "the bread of idleness."

Jesus through his Parable of Laborers (Matt. 20) rebuked unemployment: "Why stand ye here all the day idle?" Yet the reply of the unwanted workers, "Because no man hath hired us," touched him with sympathy as it does us. He placed the blame upon society for allowing such a condition to exist. This social responsibility of furnishing employment for all physically able to work is still with us.

When Jesus told his helpers that "the laborer is worthy of his hire" (Luke 10:7), he made his disciples feel that in teaching, healing, and assisting people without compensation, they were entitled to the food which was gladly given by those whom they benefited. Even day laborers who realized their own inefficiency to such an extent that they did not attempt to drive a bargain with employers for both money and food knew that they were entitled at

least to daily bread, no matter how incompetent they were at their work.

THE BIBLE AS A BOOK OF WORKERS

The Bible is a record of people at work. Its first book emphasizes the vast creative personality of God, framing heavens, earth, sea, and all that in them is. The curse of work cast upon the pair of sinners in a Mesopotamian garden did not long remain a curse. Came the day when every man, woman, and child in the communities pictured in the Bible worked and were not too unhappy in their tasks. He that did not work was never sure that he would eat. Ancient Hebrew custom required every boy to learn a trade, to insure himself from want and temptation of stealing. A rabbinical proverb runs: "He that hath a trade in his hands is as a vineyard that is fenced." Hence, Jesus like the other youths of Nazareth, joined his father at the carpenter's bench and helped support the family. He was known to neighbors as "the carpenter" as well as "the carpenter's son." Paul, too, was ever thankful to ply his trade of weaver, whenever occasion necessitated it. He reminded his brothers at Thessalonica that we did not "eat bread for naught at any man's hands, but in labor and travail, working night and day, that we might not burden any of you" (II Thess. 3:8). Looms were available everywhere Paul traveled. He could take his place before them in any household, doing a stint of weaving at whatever strip was in process, in return for his entertainment. Peter fished when occasion demanded it. And to his old trade he returned after the crucifixion of Jesus. Peter's lodging at Joppa with a tanner suggests affiliation with fellow-craftsmen. The symbols of the carpenter's square for Jude and Thomas in Christian iconography, and of the saw for James the Less, are revealing. Matthew was a tax-collector for Rome along the Capernaum highway near the Sea of Galilee. The Kingdom was not launched by idlers. They brought trained energies to its spread.

A degree of surprising efficiency characterized many trades in spite of primitive tools. This was due to the father-to-son

descent of handicrafts and other skills and to early organization of guilds or unions. There were guilds for everyone, from the baker and banker to the temple musician. For the latter there were years at Jerusalem when no person was eligible unless his father before him had been a staff member. These guilds developed considerable power in the community. Workers were essential. Even slaves sometimes revolted, as the rebellious Israelite brick-makers did in Egypt before the Exodus.

SLAVE AND FREE LABOR

As I. Mendelsohn points out in an article in the *Bulletin of the American Schools of Oriental Research*, No. 89, even at the dawn of history free workers and slaves worked shoulder to shoulder in temples, factories of the kings, and private business enterprises of Babylonia and Assyria. Competition was keen between free and slave labor as early as the Third Dynasty at Ur and was vigorous in the Late Assyrian period. Free labor always held its own; yet privately owned slaves were skillful weavers and dyers and were often apprenticed, especially during the Cyrus Persian period. This we know from recovered clay tablets telling of the master's providing food and clothing for five or six years' apprenticeship, during which the expert was expected to teach the slave to become an able dyer or gem-cutter, baker, fuller, or leather-worker. If the master did not get results, he had to pay a tax to the slave-owner. Mendelsohn brings out that free labor was never supplanted or dominated by slave labor, especially in the skilled crafts. Most families could not spare their slaves long enough to have them learn trades. Moreover, they could hire free craftsmen for little more than slaves.

An interesting clay business document (Late Babylonian Letters, Thompson) tells of a strike by Neo-Babylonian free gem-cutters, who protested against two months' unpaid wages, were "not pleased," and were consequently not going to continue to do the king's work! Every time we look at our own Babylonian cylinder-seal made in the era of Abraham and Hammurabi, we marvel at the fineness of its design, incised on hard steatite with

primitive tools, and wonder whether slave or freeman made it.

PROFESSIONS

ASTRONOMERS

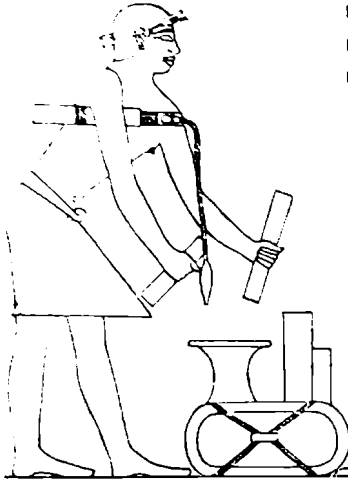
Professional men of Bible lands included astronomers of Babylonia, Assyria, and Egypt, whose reading of the heavens was so accurate that they identified the zodiac and constellations, computed calendars, and predicted eclipses with incredible success. They were more reputable than the Babylonian magicians, and astrologer-stargazers condemned by Second Isaiah (47:13). Egyptians studied the stars that they might worship them. But Babylonians were more scientific. We cannot guess how early astronomers were studying the heavens along the banks of the Euphrates, purifying nascent science from taint of magic and applying it to civilized life. From Babylonia, astronomy made its way to Greece, whose school of astronomy at Egyptian Alexandria was unsurpassed. In the third and second centuries B.C., the great scholars Aristarchus and Eratosthenes were observing the heavens in this Mediterranean port-center of culture. Ptolemy in the second century A.D. was the outstanding astronomer, founder of the Ptolemaic system.

The accurate calculations of a Chaldean Wise Man led himself and two friends from the East to Christ's manger at Bethlehem. "We have seen his star in the east, and are come to worship"—not the star, as cruder men did, but "we are come to worship him."

PHYSICIANS, SURGEONS, APOTHECARIES

The first doctors in Bible lands were no more than magicians. They showed a certain amount of practical ability, such as plugging noses to stop hemorrhages. But many of them were as ignorant as Arab medicine men employed by some Palestinians today, whose victims are gradually being weaned away by such able clinics as the Straus Health Center and the American Colony Child Welfare Association in Jerusalem. The woman of Jesus' time, who

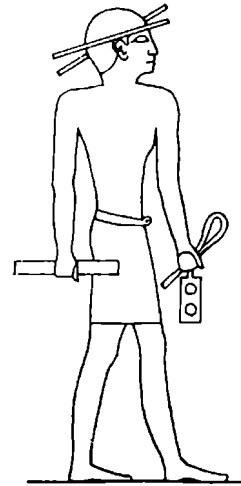
SCRIBE WITH A PALETTE UNDER HIS ARM STANDING BEFORE A WRITING TABLE ON WHICH ARE A POT FOR WATER AND TWO WRITING TABLETS.



SCRIBE WRITING WITH A REED BRUSH ON A SLIP OF WOOD. HE CARRIES A LONG NARROW PALETTE IN A CASE UNDER HIS RIGHT ARM. IN THE END OF THE PALETTE THERE ARE TWO CIRCULAR DEPRESSIONS FOR PAINT, IN THE CENTER A GROOVE TO HOLD A SET OF REED BRUSHES.



WITH A BRUSH OVER EACH EAR AND A PALETTE WITH TWO CIRCULAR DEPRESSIONS FOR PAINT IN HIS LEFT HAND THE SCRIBE STANDS READY TO SUBMIT HIS MANUSCRIPT.

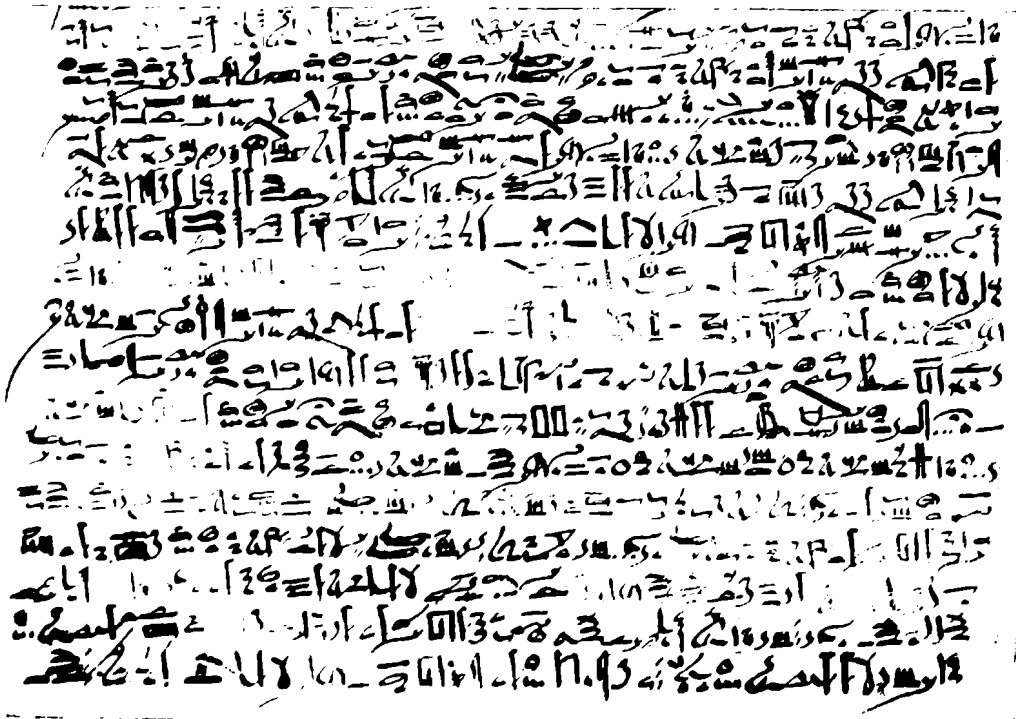


FROM WALL-RELIEFS IN THE TOMB OF KAGEMNI AT SAKKARA.
DYN. V (ABOUT 2750-2625 B.C.)

FROM A WALL-RELIEF IN A
MASTABA-TOMB AT GIZEH.
DYN. IV (ABOUT 2900-2750 B.C.)

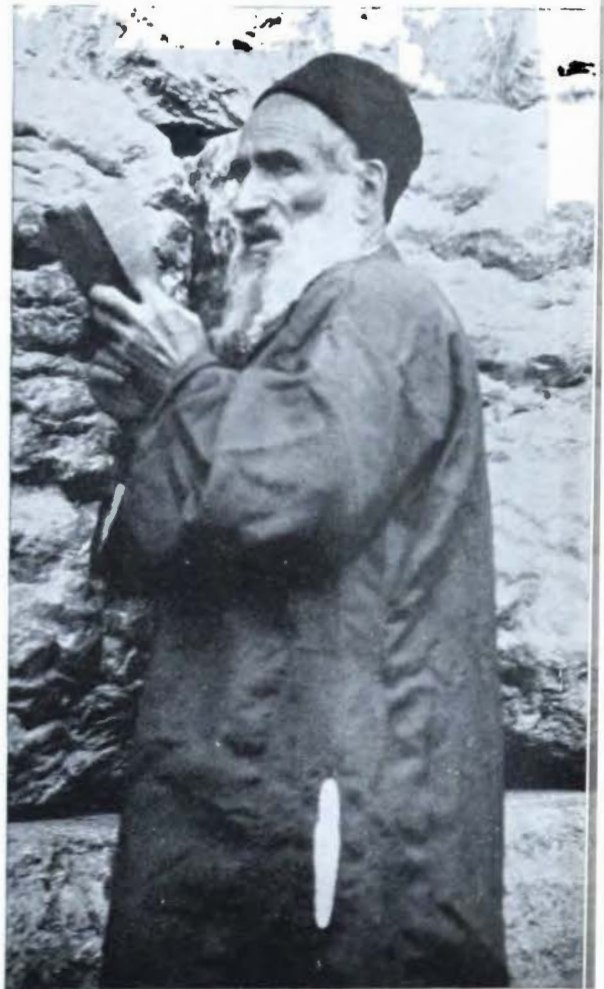
186. Scribes. (Metropolitan Museum of Art)

187. From column 3, Edwin Smith Surgical Papyrus, in the Brooklyn Museum. Treatment suggested for a head wound with compound fracture of the skull and head wound perforating the sinuses. Egypt, probably in the Hyksos period. (Brooklyn Museum)





188. Fishermen of Galilee (John 21:3, 7).



189. Every Friday afternoon from three to five o'clock, pious Jews of Jerusalem frequent the Wailing Place, whose masonry was undoubtedly part of Solomon's Temple Area construction. The picture shows a rabbi reading litany lamenting the destroyed Temple of his people. Papers bearing prayers are placed in crevices of this sacred wall.



190. A metalsmith in his shop at Syrian Homs. With simple bellows, furnace, anvil, and hammer, he perpetuates one of the oldest crafts of Bible lands (Gen. 4:22).



191. A Syrian weaver at his loom. Paul in making tent cloth practiced the weaver's craft (Acts 18:3).

192. A woman of old Corinth, twisting onto her spindle new-cut sheep's wool (Prov. 31:19).



193. A miller's establishment at Ostia, with huge mills for wholesale grinding of grain.



had "suffered many things of many physicians" and had spent all her means seeking health, came at last to the Great Physician who devoted more of his ministry to healing than to any other work save that of teaching. He referred to the profession of medicine when he said, "They that are whole have no need of a physician, but they that are sick" (Mark 2:17). And again, "Physician, heal thyself" (Luke 4:23).

It is not by chance that Luke, author of the most beautiful narrative of the birth of Jesus and who possibly derived information from Mary herself, was known as "the beloved physician." One who had been so close to the confidence of our Lord's mother might well have developed the tender as well as efficient Christian personality we attribute to this Greek physician, perhaps from Antioch, who traveled with the invalid missionary, Paul.

Doctor Luke, like many modern physicians, was a man of wide general culture, given to the pursuit of literature and art, as well as of science. His name is associated with the third Gospel, with the first Christian hymns, including the superb "Magnificat" of Mary, and with painting. It is believed that Luke took his medical education in the Greek island of Cos, or its rival, Cnidus, where there were notable asklepieia or centers of healing, such as we have seen at Corinth. Long before Luke's day, prophets of Judah were familiar with professional skills of doctors. Jeremiah (8:22) once cried out, "Is there no balm in Gilead? is there no physician there?"

We get from the Old Testament a few glimpses into the *materia medica* practiced in Bible lands. Dipping in a sacred river such as the Jordan seems to have been a panacea even for leprosy, and washing in a filthy pool like Siloam was looked upon as a magical cure-all. Boils, even when inflicted upon a Hebrew king like Hezekiah, were treated with Isaiah's prescription of hot figs—not a bad sort of hot, moist poultice in any age (II Kings 20:7). The Egypt of Joseph's day had plenty of physicians, one of whom was ordered by Joseph at Pharaoh's court to carry out the elaborate mortuary preparations customarily conducted by doctors, especially the removal of viscera for embalming.

The Old Testament records a diagnosis of various diseases of the intestines. King Ahab of Samaria had cancer of the bowels. Leprosy afflicted Moses and his sister Miriam, as well as Captain Naaman of Syria and King Uzziah. Daniel speaks of one occasion when he was ill for several days, fainting, disabled, finally convalescing to do the king's business (10). Herod the Great had an incurable and unnamed disease for which he was treated at the hot baths of Callirhoë near the Dead Sea, a popular winter spa in modern times. Eye diseases were disgracefully prevalent. An early suggestion of venereal disease may be found in Gen. 20. Thus we see that people of Bible times were afflicted with many of the illnesses still prevalent in lands where sanitary and health conditions are none too effectively administered yet.

The Great Physician Jesus healed many times by sheer power of prayer, as when he cured the centurion's servant, and the little daughter of a synagogue ruler (Mark 5:35-43), whom he touched with his hand, bidding her rise from her couch. Again, he cured a blind man by putting clay moistened with spittle on his eyes and telling him to "go wash in the pool of Siloam" (John 9:7). The positive therapeutics of his divine personality seem to have been effective for the woman with an issue of blood, who touched fringes of his hand-woven garment and was made well again. Doctor Luke, who may have known the technique of first-century Apollonias of Cyprus, specialized in records of Jesus' healings.

Evidence of early Babylonian physicians is given us by their tariff of prices and penalties for malpractice, listed in the Code of Hammurabi, written in the era of Abraham the Patriarch. The great clay-tablet library of Assurbanipal contained some 800 medical texts, most of which have never yet been translated. Speaking of the advanced skill of the healing arts in Babylonia and Assyria, Walter A. Jayne in his admirable volume, *The Healing Gods of Ancient Civilizations*, cites the valley dwellers' belief in the supernatural origin of disease. He traces the relation between priestly sacrificial rites and exorcism of disease, the education of physicians in temples, and the carrying out of invalids into

public squares, as in Palestine of Jesus' time, where they compared notes with fellow-sufferers and heard words from "Job's comforters." Jayne makes clear the function of the gods Allatu, Ea, and Ishtar in the matter of healing. The chief Babylonian god of healing was Ea, god of curative springs and the "last resort" of sufferers. The medical role of Ishtar was related to childbearing and attendant ills. Next to Ea, Marduk was the most successful practitioner-god of healing. The Babylonian sun-god, Shamash, helped to prolong life.

The Egyptian god of healing was Imhotep, a versatile combination of royal architect and wisdom-writer. The origin of Egyptian medicine was attributed to Apis of Memphis. Isis, sometimes depicted in the late dynasties as a nursing mother, was a "healing deity of the highest rank," especially for children, who were adorned with her amulets. Egyptian physicians were expected to prescribe even hair pomades, for Nilotic people abhorred baldness, even if concealed by wigs. A favorite tonic consisted of donkey teeth crushed in honey.

Surgeons' skill in ancient times has been brought into much higher esteem since James H. Breasted spent many years translating the Edwin Smith Surgical Papyrus, now in the possession of the Brooklyn Museum (illus. 187). This document, coming probably from the age when the Hyksos were dominant in Egypt, shows the progress made "from superstition to surgery." This lengthy papyrus document has 21 columns 15 in. high. The treatise was 15 ft. 3½ in. long—a copy made in the seventeenth century B.C. of an original written in the Pyramid age, c.3000-2500 B.C. Its author is unknown. It looms so important that it has been attributed to the architect-physician Imhotep, the earliest known physician practicing in the thirtieth century B.C. The papyrus, written in hieratic Egyptian, more rapid than hieroglyphic writing on stone, was bought by Edwin Smith at Luxor a generation ago—probably after a vandal had stolen it from a tomb. Smith was one of the first Americans to study the Egyptian language. But it remained for Breasted to take up its difficult translation in 1920. He found it to be a priceless document prepared when

surgery was first creating its terminology, some 5,000 years ago. It begins with treatment for injuries to the skull and brain and works downward to treatment for other parts of the body. We do not know whether this papyrus was a physician's handbook, or outlines of a medical professor's lectures, or some careful student's notebook. The portion of it shown in the picture deals with treatment for a head wound with compound skull fracture. It is surmised that the doctor of the papyrus followed the army and there studied and treated casualties.

The Metropolitan Museum of Art has photographs of soldiers' wounds encountered in the Egyptian army before 2000 B.C., as discussed by H. E. Winlock in the *Museum Bulletin* for February, 1928, Section 2.

Greek physicians drew especial inspiration from the god Aesculapius, whose caduceus is on doctors' motor license plates today. A score of god-health-guardians included Hygeia, Nymphs of the springs which allayed skin diseases, Orpheus who healed with his soothing flute, and demigods and mythical heroes associated with curative powers.

The Roman love of rugged living made no place for a special deity of healing but raised altars to minor gods associated with specific disorders: to Febris for fevers; to Cloacina for foul-air diseases; to Angina for heart pains; to Verminis for cattle diseases. The paterfamilias "doctored" his children with herbs, consulted oracles, and relied on hot baths in cheerful thermal establishments.

Bible lands were not without apothecaries. An old Nippur drugstore has come to light through a clay tablet of the pre-Sargonic style of c.2600 B.C., in a drawer of the University Museum at Philadelphia, where it had long lain untranslated. It created quite a stir at a recent convention of medical men in that city when it was reported to contain a prescription for treating the foot of a man burned "from things in a furnace"—some ancient metal-worker. It tells of rushing to the man a balsam potion made of "barley, salt, and cassia." It calls for a plaster on the leg and an anointing with barley-beer and hot water, sesame and cedar oil. A water snake was

to be crushed and pounded, and the milk teat of a cow washed and ground—possibly for a sort of artificial skin (see *Bulletin of the University of Pennsylvania Museum*, January, 1940).

Old Testament apothecaries were also perfumers, dispensing as they do today cosmetics, scents such as attar of roses, incense for temples, rose water and violet essence for candy flavoring, and licorice water, as well as herbs for medicine and flavoring. Many oriental towns still have their Perfumers' Bazaar or street where are sold pomades, unguents, kohl to blacken eyes, yellowish-red henna juice to color toe and fingernails, rouge, tweezers, and toilet boxes.

An Old Testament example of a "get-well gift" appears in Isaiah, where the son of Baladan, King of Babylon, sent to Hezekiah at Jerusalem "letters and a present . . . for he heard that he had been sick, and was recovered" (Isa. 39:1).

PUBLIC OFFICIALS

Secular history of ancient times gives so many facts about administrators of Babylonian, Egyptian, Palestinian, Syrian, and Graeco-Roman life that we need here only mention the kings, governors, chamberlains, treasurers, taxgatherers, cupbearers, and court attachés who made up the officialdom of an ancient state.

The Babylonian-Persian and Roman administrations of the ancient East continue to astonish students of political science. Jesus came into daily contact with the efficiencies of the Roman Empire, as did Paul and the first disciples. From a taxgatherer like Matthew he drew one of his Twelve.

Money-changers dealing in the coins of foreign worshipers at the Jerusalem Temple have been mentioned under Business Transactions, page 143.

RELIGIOUS LEADERS

The pious, bearded old man worshiping at the Jewish Wailing Wall in Jerusalem (illus. 189) is representative of the men of God who have through millenniums tried to lead people here into closer fellowship with Jehovah. From the earliest priests and prophets such as Melchizedek of Salem,

before the city of David became Uru-salim, "city of peace," to the present time, rabbis, Moslem priests, and Christian clergy have celebrated their offices in the Holy City. The short strip of sacred wall seen in this picture contains several courses of stone, one of whose blocks is 16½ ft. long and 13 ft. wide. It is believed to be a section of the Solomonic Temple Wall—the last fragment of their sacred worship place left to the Jews. It is protected against encroachment of Moslem authorities controlling the adjacent site of the Temple by the impartial British Mandate of Palestine. As we look at Friday worship so sincerely engaged in by the bearded man of our picture, the various men of God who have made up the religious leadership of Palestine appear before us.

PROPHETS

Forth-tellers of the will of God for the age were the prophets. By highly sensitive conscience and mystical communion with Jehovah they gained assurance to protest against the social sins of their day; Amos against corruption at Samaria, and Isaiah against both religious and political iniquities at Jerusalem. A prophet was a seer, a man of God, a servant of Jehovah, an interpreter. In the period of the judges there were bands of prophets: at Gibeah in the reign of Saul; at Ramah in Samuel's life; down in the Jordan Valley; and at Beth-el and Gilgal in the era of Elijah and Elisha. Throughout all the stormy years when Judah and Israel were pressed by enemies from the east and south, prophets courageously uttered their warnings and advice—Jonah, Amos, Hosea, Isaiah, Micah, Zephaniah, Nahum in the Assyrian age; Jeremiah, Habakkuk, and Ezekiel in the Chaldean period; Isaiah, Deutero-Isaiah, Haggai, Zechariah, and Malachi in the Persian period of Hebrew history. Their supreme message of the prophetic books was realized in Jesus the Messiah. As prophet, priest, and king he offered his people and the world a golden age of peace marked by equity and complete fellowship of all men and all creatures, with knowledge of God covering the earth as the waters covered the sea (Isa. 11).

PRIESTS

In every land of the Bible priests were the most influential members of society. Based on supernatural powers, some of which were more than readings of the flight of birds or signs in entrails, their counsel dominated even kings. Many prophets were really giants of combined earthly and religious wisdom. Priests of the temple of Baal directed the complex of palaces, moneylending, and coin-minting establishments; priests of Ceres and Neptune, at the Greek temples extant in Italian Paestum, dominated this grain center and shipping port; and the priests of Isis in Egypt or Pompeii affected human history. So, among Hebrews, priests were the holiest of religious leaders, entrusted with conducting the sacrifices at Jerusalem Temple and with receiving tithes from the people—not an exact sum for each man's offering but something in accord with his means. Priests had palaces and enormous staffs of subordinates at Jerusalem. There were good priests, such as Zecharias, the father of John the Baptist, and very evil ones, such as Caiaphas, the high priest who counseled the death of Jesus. Priests could enter the holiest portions of the Temple and handle its most sacred treasures. Hebrews liked to recall their foundation by Moses from the tribe of Levi, from whom the Levites were always called. Priests were Levites. But in time the group of Temple staff called Levites had different functions from the priests. To their care the property of the Temple was especially entrusted, as their ancestors had guarded the Tabernacle. Not owning territory or cultivating land of their own, Levites could not pay tithes to the priests, but they tithed the offerings paid to them by worshippers. Levites were in a sense, go-betweens for priests and laity.

The profession of religious leadership included the Temple singers and musicians, of whom David installed a large staff (see p. 291, Musical Instruments).

SCRIBES AND LAWYERS

Scribes (*sopherim*) developed during and after the Exile for the purpose of interpreting the Law. With Ezra, "a ready

scribe," as the "father" of their profession, they introduced a new set of sacred rules brought from Babylon, known as the "Priestly Code." Punctilious in reverence for Hebrew law, they in time developed "the faults of their own virtue" and grew arrogant, hungry for compliments, jealous of their seats as a special class in the Sanhedrin, and domineering in the synagogues, which they had a part in establishing. Scribes were also teachers of the Law, gathering about them on the floor pupils whom they compelled to memorize without slightest alteration the sacred laws, even as children memorize the Koran in Egypt today. Some authorities believe that the Book of Ecclesiastes may be a pupil's notebook based on sayings learned at the feet of some great scribe.

Scribes became also expert copyists of manuscripts and writers of messages from both religious leaders and royal courts. One of the most fascinating examples of the function of a scribe is recorded in the Book of Ezra. There it is related how enemies of the devout men of Judah and Benjamin, who were diligently repairing the Jerusalem Temple with permission written in a decree of Cyrus, stirred up motley citizens of a mixed Hebrew and Mesopotamian origin to engage Shimshai the scribe to write to Artaxerxes, King of Persia. The letter reports that the returned Jews at Jerusalem "are rebuilding the rebellious and bad city, and have finished the walls, and repaired the foundations"; will soon be refusing to pay tribute and will act disloyally to Artaxerxes, who, if he will look among his Babylonian archives of clay tablets, will find that in times past, these same Jerusalemites have been guilty of sedition. Of course, the Persian king found the evil report he was looking for and sent a decree to halt the work. Shimshai the scribe was delighted to receive the decree and hurried with it to Jerusalem, where he stopped the construction work until the second year of King Darius of Persia, at which time the prophets Haggai and Zechariah spoke courage in God's name to the people. Under Zerubbabel and Joshua the work on the Temple was resumed. Using his own careful scribes' files, Darius had been able to locate the clay record of his father

Cyrus, making the original grant of permission. The whole matter was cleared up—so much so that Darius ordered a gift of animals, incense, salt, wine, and wheat to be given the Hebrew priests for their sacrifices when the Temple was again in order. "And this house was finished in the third day of the month Adar . . . in the sixth year of Darius the king" (Ezra 6:15).

Even in secular affairs, scribes were prominent as recorders of kings' possessions, contents of granaries, and taxes paid. Illustration 186 shows details of an Egyptian scribe's equipment, which was common to various Bible lands. "Scribe" and "script" come from the same root. Scribes in Egypt and Babylon were as important as in Palestine but did not have the religious significance of the Hebrew scribes, of whom Baruch and Jonathan were good examples. By the time of Jesus, the scribes as a class were among the severest critics of Christ, censuring him even for his table companions. Scribes received one of the hottest condemnations from Jesus, who called them hypocrites, whitened sepulchres, offsprings of vipers, blind guides, impeding people who sought to enter the Kingdom of God, extortioners disregarding the "weightier matters of the law" while they quibbled about tithing inconsequential mint and other herbs. "The chief priests and the scribes sought how they might put him to death; for they feared the people" (Luke 22:2).

In preserving old laws and sacred manuscripts, scribes of all Bible lands served us all. In the excesses of their offices they were despicable.

Occasionally we read of "the Pharisees and their scribes" or "the Pharisees and the scribes among them" (Luke 5:30).

Doctors of the law, such as were sitting in Galilee watching Jesus heal a palsied man (Luke 5:17-25), and such as the venerated Gamaliel (Acts 5:34), who was both doctor of law and Pharisee, had specialized in the sacred statutes and were able jurists. Some lawyers were members of the Sanhedrin, the highest court of Hebrew justice. The functions of lawyer and scribe were much the same (see above). It was a lawyer who asked Jesus the question which produced his famous answer, that the greatest commandment is

"Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind" (Matt. 22:35-7). Another lawyer, trying Jesus by asking him what he should do to inherit eternal life, elicited the matchless Parable of the Good Samaritan (Luke 10). Jesus, who had often been annoyed by carping lawyers, once gave them the rebuke they merited: "Woe unto you lawyers also! for ye load men with burdens grievous to be borne, and ye touch not the burdens with one of your fingers" (Luke 11:47). Lawyers were always trying to trap Jesus on trivialities; even when he was healing on the Sabbath. In contrast, Joseph of Arimathea, a councillor, was "a good and righteous man" (Luke 23:50).

PHARISEES AND SADDUCEES

Pharisees were a Jewish party who used their power for political ends, especially in the matter of extreme nationalism which protested against everything non-Jewish. They therefore became uncharitably scrupulous about observing a separated way of life, adhering to the Law to the last jot and tittle. Together with the Sadducees and the scribes, they bitterly opposed Jesus. Sadducees were indifferent to traditions which meant much to the Pharisees, but they believed in immortality and the transmigration of souls. They opposed Jesus because of his claims to a messiahship which might menace their own political power—so completely did they fail to grasp the spiritual nature of his mission.

RABBIS

The rabbi, or rabboni, was a teacher or master, deserving of great respect. Disciples addressed Jesus as "Rabboni." From the time of Gamaliel, a rabbi presided over a synagogue. Nicodemus, who himself was ruler of the Jews, said to Jesus, "Rabbi, we know that thou art a teacher come from God" (John 3:2).

MINISTERS AND TEACHERS

Ministers and teachers are both mentioned by Ezra (8), who sent for a certain Joiarib to instruct, and ordered brought

from Casiphia "ministers for the house of God." In the Gospels, the title "minister" is used to indicate an attendant in a synagogue, as when Jesus handed the roll of Isaiah to the minister (Luke 4:20). The term also means one who serves, as when the Master said, "Whosoever would become great among you shall be your minister" (Matt. 20:26). In the Apostolic age, Paul uses the word more as we do: "I heard a voice saying unto me, . . . I appeared unto thee, to appoint thee a minister and a witness" (Acts 26:14, 16).

ENGINEERS

Engineers in Bible lands were busy with surveying in Babylonia and Egypt, with construction of water supplies in Palestine and elsewhere, and with erection of such enormous structures as the pyramids and temples.

TRADES

BARBERS

From the beginning of the civilizations recorded in pages of Scripture, the barber was important. The Genesis narrative of Joseph's release from prison tells how, following customs of the Egyptian court, he "shaved himself, and changed his raiment" before he came into Pharaoh's presence. Egyptians abhorred hair. Many of them had their heads and bodies shaved every few days. They preened themselves in thick artificial wigs of heavy bobbed hair and used ceremonial beards.

Even queens sometimes resorted to this dignity. Artists bearded gods in their work. The wig-maker was essential. Another important figure was the barber, who, as in medieval Europe, assumed many duties of the physician, acting as bloodletter and dentist.

Semites were known for their long, thick hair, sometimes held in place by a fillet around the forehead, and for their stubby, pointed beards, extending over cheek bones. Many ancient processions in art identify Hebrew captives by their beards framing yellowish-brown faces. Jews honored their beards and even to this day pious sects pride themselves on long locks

of hair called "love-locks," hanging from the forehead.

In Babylonian society the barber was a busy fellow with tongue and with razor. An old Mesopotamian proverb found on a clay tablet reads:

Strife you find among servants,
Gossip among barbers.

Several barbers were attached to every court. Others were willing to give a shave anywhere, even along roadsides, where they would set to work with razor and basin despite dust infections. Some of them worked in poorly lighted but well-patronized cavelike shops, such as we see in Jerusalem inside the walls today. Arabs abhor smooth faces. Handsome beards become them.

Romans of Bible times liked smooth faces. Beards they assigned to slaves for contrast.

BOAT-BUILDERS

Boat-builders were more important in Egypt and Mesopotamia than in Palestine, where rapidly descending rivers were not suited to navigation, unless we can count Jordan ferry rafts. Water was a main highway in the lands of the Nile and the Tigris-Euphrates. The earliest Mediterranean boat-builders were Egyptians, with Phoenicians of Byblos a close second. Punts and flat-bottomed boats were used for fishing and fowling in Egyptian marshes. Huge barges, skillfully manned, hauled stone from Upper Egypt, a practice which has endured to the present day (illus. 207). Merchant boats were shaped by pegging planks together or tying them with papyrus rope. Funeral barges transported mummies and corteges to temple-tombs along the river. Ferryboats, constructed of wood, were propelled with oars or "sweeps" or poles, and with sails for upstream towings. The birdlike grace of white-winged feluccas on the Nile today is a link with Egypt's picturesque beauty in Bible times. Egyptians built barges even for the sun-god and sent envoys like Wen-Amon to Phoenician Byblos, now in the Republic of Lebanon, to purchase cedar timber for the purpose. Wen-Amon quoted high prices and was coldly received.

Phoenician neighbors of Palestine people were noted for their long-range and coastal vessels. Boatmen put great skill into the sailing of their ships, often no larger than a New England herring boat. Ezekiel in his greatest allegory gives a picture of seamen of Tyre. He envisions the city as a ship, whose builders made flooring of fir trees, masts of cedar, oars of oak, and rowing benches of ivory inlaid with boxwood; looms of Egypt supplied embroidered sailcloth. Inhabitants of Sidon and Arvad made up the crews, but Tyrians were their experienced pilots. Wise old men from Byblos caulked the ships to seal them against Mediterranean winters (Ezek. 26).

By 600 B.C. Greek seamen were improving upon Aegean ships and Phoenician models. They turned up their boats at both ends. Corinthian warships had two decks—a lower one for rowers and an upper for the fighters. To produce a merchant marine powerful enough to control trade in the eastern Mediterranean in the century that saw the carrying away of Hebrews to Babylonian Captivity, and to take care of their expanding commercial life, Greeks resorted to slave labor. They made ships too large to beach. Hence, anchors came into use. Using slave labor, proprietors of potteries, factories for hollow-bronze castings and studios for marbles built up a prosperity which liberated men of creative ability for the brilliant spurt of artistic and philosophical attainment we associate with the golden fifth century B.C.

Few boats are mentioned in Scripture. We read of the fishermen's boats of Galilee, by which Jesus made his way back and forth across the sea, and the boats large and small which figure in the Mediterranean meanderings of the Apostle Paul (see *Islands*, p. 254ff.). The navy which Solomon had at Ezion-geber (see p. 127) is another instance. Dan is described as remaining in his ships when he should have been joining Israel's forces at the battle of Deborah and Sisera at the River Kishon. Yet some translations make us doubt whether Dan ever did have ships (Judg. 5:17). The marginal translation of "ferry-boat" appearing in the David narrative (II Sam. 19) is a very modern word, "convoy." We have seen little ferries plying back

and forth over the Jordan near Allenby Bridge, where the water is shallow and free from rocks.

Postage stamps bearing scenes from Bible lands include pictures of four types of ancient boats (see p. 372). The 1926 Egyptian Navigation Commerce stamp shows one of the famous ships from Queen Hatshepsut's Expedition to Punt, portrayed in her temple at Deir el-Bahri. Note the rowers pulling vigorously, supported by auxiliary sails fully spread, and remember that this ship was of the sort used when Moses was in Egypt; some scholars believe that he was a member of Hatshepsut's court. The Egyptian one-millieme stamp for 1906 shows a Nile sailboat, which could be an ancient model or a felucca such as we have enjoyed sailing in at sunset. The 1930 Lebanese stamp for "one piastre postage due" carried a bas-relief of a Phoenician sailing vessel, possibly a Byblos trader. The Iraq one-anna stamp for 1923 shows the queer "guffas," round, tublike boats still used for crossing the Euphrates.

BUILDING TRADES

BRICK-MAKERS AND BRICKLAYERS

Brick-makers and bricklayers were essential units in building trades of Bible lands. To the former we have already referred. The men who laid the sun-dried or kiln-baked bricks were as expert with their trowels as the stonemasons. We have mentioned the revolt of their guild in Egypt when it was ordered to turn out more bricks without even straw to place between the layers.

Guilds or "unions" of brick-makers and of stonemasons traveled in groups through the country with their tools, ready for work wherever they might be needed. Measuring rods, plumb lines, leveling lines, hammers, baskets for removing earth and chips, hoisting ropes, chisels, and trowels were among their equipment.

CARPENTERS

Isaiah describes the long process of production undertaken by the Babylonian carpenter, who hews cedars, holm trees, oaks, and ash; converts the trees into

planks; shapes the planks with plane; marks them with compasses and pencil; and finally sets them in plumb with his stretched-out line. Isaiah deplores the craftsmen's perversion of carpentering skill into a mere warming of himself with fire, and to kindling fires for bread-baking and meat-roasting, so that he says "I am satisfied." To make matters worse, the carpenter of "the residue thereof . . . maketh a god, even his graven image . . . falleth down unto it and worshippeth, and prayeth unto it, and saith . . . thou art my god" (Isa. 44: 12-17).

Early Hebrews were not apt carpenters; when important structures like the Jerusalem Temple and palaces were under construction, they imported such craftsmen from Phoenicia. By the sixth century B.C., however, they had developed carpentering skill, for Nebuchadnezzar carried carpenters, together with smiths, into Captivity at Babylon (Jer. 24:1). And the carpenters and builders who took part in restoring the Temple at Jerusalem under Josiah seem to have been native workers.

In Palestine, where even peasant homes were of stone or mudbrick, carpenters' products included doors, window frames, roof beams, simple furniture like stools and low tables, and yokes and plows. Their tools were practically the same as those of carpenters today. Most important was the adze, kept in the belt ready for all sorts of purposes. A lump of sandstone served as a plane; occasionally a chisel was used. A saw was essential; the earliest ones consisted of flint "teeth" with serrated edges, mounted in a frame. Other saws were like knives of bronze or iron. The large western handsaw was unknown, as were shears, file, and rasp. Small handsaws were held like ours, but the teeth were shaped in the opposite direction, so that the worker did not shove but pulled against the wood. The carpenter's hammer was usually of heavy stone, sometimes drilled with a hole for inserting a handle. Palestinian carpenters used no such worktable as artists have shown in the Nazareth shop of Joseph and his sons. They sat on the floor and held beams between their toes, which became as skillful as extra hands.

Egyptian carpenters had more to do than Palestinian ones. There were palaces to beam and trim, wooden mummy cases to fashion, and jewel boxes to shape. The irrigation pumps (*shadûfs*) required considerable skill to erect. There were boats to be built for canals and river, and many small wares, such as handles for the king's hunting harpoons, had to be turned out. Egyptian carpenters also made huge wooden coffins, joining the surfaces with clever wooden pegs. Wood was so scarce that they strove for fine results with minimum materials. We see the quality of their craftsmanship today in such furniture as Tut-ankh-amun's throne chair and the carrying-chair, or palanquin, of the dowager-queen, Hetep-heres.

Petrie believed that some of the largest wood construction undertaken by the ancient Egyptians was the building of the giant boats used to transport obelisks to temples. Each boat, 150 ft. long and 40 to 50 ft. wide, carried two obelisks end to end. Other large-scale carpentry products in Egypt were gates, pillars, and temple doors.

Even the great palace city of Memphis was built of sun-dried brick and wood, so that little or nothing remains of the stately homes of the pharaohs, although the stone-built tombs have outlasted the centuries. The oldest stone structure in the world today is the 200-ft. Step Pyramid of Saqqarah near Memphis, built in the thirtieth century B.C. as the tomb of King Zoser.

Many carpenters' tools of ancient times have been excavated. The University Museum at Philadelphia has predynastic Egyptian axeheads, chisels, and adzes. One adze from a pit-grave is of electrum. Later ones are of copper, bronze, and iron. The shaft-hole axe had already been invented in the Royal Tombs age at Sumerian Ur. Egyptians used the flange-bladed copper chisel in the time of Queen Hetep-heres, mother of Khufu.

STONEMASONS

The stonemason was more important in Palestine than the carpenter. There was more native material for him to work

upon. He was equally important in Egypt, where the giant pyramids, temples, palaces, and tombs required an inexhaustible supply of stone-workers. Egyptian masons had a unique way of setting stone without mortar, depending upon weight to do its natural work. The whole history of Bible lands can be read by archaeologists in terms of the type and quality of masonry at given periods. Some of the best yet found at Beth-el, in Palestine, dates from the Late Bronze Age. Even though Phoenician stone-workers from Gebal (Byblos) were imported by lavish Solomon, Hebrews became adept masons, and even priests used the trowel in repairing the Temple and city walls from time to time.

Foundations of solid stone in a rain-washed country were important. Hence the emphasis of Jesus upon founding a house upon a rock, so that when rains descended and floods came and winds blew, it did not fall, like the home of the foolish man who had built his upon foundations of sand (Matt. 7:24-27). When the new foundation of the Temple at Jerusalem was laid, "many of the priests and Levites and heads of fathers' houses, the old men that had seen the first house . . . wept with a loud voice and shouted for joy." Foundations of palaces built by Darius and Xerxes were so important that deposits including tablets of solid gold and silver were inserted, just as today treasures are placed in cornerstones of churches. Some of these foundation deposits have been excavated at Persepolis by the Oriental Institute of the University of Chicago. Paul stressed the importance of enduring foundations when he spoke of the basis of Christian character: "as a wise master-builder I laid a foundation and another builded thereon. . . . Other foundation can no man lay than that which is laid, which is Christ Jesus. But if any man buildeth on the foundation gold, silver, costly stones, wood, hay, stubble, each man's work shall be made manifest" (I Cor. 3:10-13).

Old-time masons built many low walls for farms and sheepfolds, houses, town enclosures, and city gates. They liked to set their first layer on bedrock, let it dry, and then continue with the upper layers. It was considered a great discourtesy for

one man to build on another's foundation (Rom. 15:20). Great skill was displayed in laying cornerstones; these were usually square and were placed on the first tier of oblong stones, at the point where it met the course coming from a right angle.

Masons built the Temple at Jerusalem without sound of hammer or chisel. The stone was cut at the quarry and brought to the Temple site ready to set up. Hiram's stone-cutters cut great, costly stones with saws, according to measure, for the foundations and inner surfaces, courts, and porches of the Temple. Some of the stones were 8 and 10 cubits long (I Kings 7:9-12). At the quarry in Syrian Baalbek we have seen temple stones of such tremendous size that to this day they have never been transported to their destined places but lie embedded in sand.

Local quarries must have furnished the stone used in Solomon's Temple, for the hills of Judaea are full of suitable limestone, white as snow when new, mellowing to ivory of great beauty through the years. Solomon's Quarries, an enormous cavern adjacent to the Temple Area, between Damascus Gate and Gordon's Calvary, have been suggested as one of the sources of supply used by the masons of the Temple. However, the limestone we have seen in this cave—a huge opening 300 ft. wide and running 250 yds. southeast through the basic rock of a cliff topped by the wall of the Bezetha section of Jerusalem—is too soft to have been used for the Temple. Some vertical blocks, wedged from the rock and intended to be loosened with water, rather than with tools of iron, are still in place.

This Jerusalem quarry saw some of the early meetings of Freemasonry, whose mother lodge of world organization began in England in 1717, based upon many features of the trade guilds whose skills went into the construction of Solomon's Temple. The master mason of the Hebrew monarchy developed, down the centuries, into the third-degree Mason of the lodge. The apprentice, the fellow-craftsman, and the master mason of operative masons assumed corresponding degrees in speculative masonry. Even the manner of wearing the apron, which identified the station of the worker on the construction job of the

tenth century B.C., is carried over into lodge rituals today; no member may participate without wearing his apron in a manner corresponding to his degree. The trowel of the mason was in antiquity prized by many rulers as much as the scepter.

As Elihu Grant pointed out in his *Peasantry of Palestine*, nearly every village engaged in quarrying the stone-dressing. Every hillside furnished limestone for the kilns. We have admired whole towns of stout stone homes; at Safed, there are ancient terraces of dwellings made of limestone held secure by lime cement, or of pottery ground up for cement. Soft crumbled stone is used for filling in, and a contrasting red or tan for trimming.

Masons also roof homes in Palestine, where wood is so scarce that domes of stone are more feasible. Led by able craftsmen from outside, whole villages help roof a new home, with shout and song.

Solomon's age heralded a new era of masonry and architecture not only at Jerusalem but in his chariot cities, such as Megiddo and Hazor. Masons who worked at Gezer and Tell el-Hesi (cities V and VI) showed the beneficial influence of Phoenician workers. Mizpah and Samaria also tell in stone the story of Israel's cultural advance. The better masonry which appeared in Solomon's time was partly due to the supplanting of crude old hammers by the ashlar. Blocks were dressed with more accurate alignment of courses. Even when these were not worked on their whole face, their margins were carefully squared. An example of fine Solomonian masonry has been found in the tower of an outer wall at Gezer.

Members of the building trades were well paid at Jerusalem during the Hebrew monarchy. When repairs were being made to the Temple in the reign of Jehoash, people contributed so much money to the chest that the king's scribe and high priest put it up in bags, counted it, and then weighed it out to pay "the carpenters and the builders . . . and the masons and hewers of stone." The men who retailed the timber and hewn stone were also satisfactorily compensated (II Kings 12)—an astonishing thing in the East, where bargaining and reckoning are universal.

Egyptian stonemasons of the Twelfth Dynasty were turning huge stones on wooden rockers, which could be elevated several feet by a series of stout wooden wedges inserted under the runners. Stones were dragged up ramps, which were lengthened as building progressed.

Masons' tools throughout the lands of the Bible were mallet or maul of hard stone, level, plumb line, square, boning rods to check joints, and chisels—best when made of bronze, hardened by long hammering. Hammers were used to drive chisels. Some hammers have teeth and two faces set on the central part of the head, one end of the hammer being sharp as a pick.

Laborers of unskilled sorts, for example, hod carriers, repair men, and burden-bearers, played minor roles in the building trades.

Timber-cutters were affiliated craftsmen and were at the basis of construction work. Of ancient peoples, Solomon declared to King Hiram that there were none that knew how to cut timber like his Sidonians. And these Phoenician port-city people living at the base of the Lebanon also had facilities to ship their timber south to Palestinian Joppa and Egypt. Sometimes they lashed huge logs together and floated them south on the Mediterranean without using any cargo vessels.

FOOD-PRODUCERS

The agriculturist has already been discussed in Section 1. Farmers maintained the life lines of all Bible lands.

BAKERS AND MILLERS

Bakers were important in the chain of food production. For even in villages where mothers were the chief bakers of the round flat sheets of coarse brown bread, there was often a public baker. He kindled his beehive oven with quick brush fuel and baked the dough, together with meat and vegetables, carried to him by children on trays balanced on their heads. We have seen such scenes at Tyre and in North African towns. After the baker removed with a long shovel the baked bread or cakes, he sometimes greased them to

give a glossy finish, as he sat on the ground at work. There was also the meal-offering to be baked on a flat plate or frying pan, without leaven or honey or oil, and brought to the priest, who burned it "with sweet savour unto Jehovah" (Lev. 2:4-9).

The most publicized baker in Scripture is the ill-fated one of the pharaoh of Joseph's time, who was tossed into prison because his pastry had not tickled his king's palate. In dungeon the baker dreamed that three baskets of white bread were on his head. The top basket contained all sorts of fancy baked food at which birds pecked. Joseph told the baker, and rightly, that within three days Pharaoh on his royal birthday would hang him on a tree, to be devoured by birds (Gen. 40).

"The street of the baker," out of which Jeremiah was rationed a loaf of bread daily by King Zedekiah until Jerusalem's supply was exhausted, reveals the custom of zoning industries in Bible lands. The joiners and coppersmiths had their own bazaar, the cloth merchants and jewelers theirs, and the spice merchants their own rows of dark little stalls.

Egyptian bakers were compelled to render strict accounts of their stock of materials to their lord's overseer of granaries. Small models of such scenes have been found in excavated tombs. See picture 156 of scribes or accountants at work.

Closely associated with the baker is the miller. Among working people the chief miller was the mother. She and a sister or daughter sat facing each other as they turned, with wooden handles, the heavy grinding stones 1½ ft. in diameter. In most ancient times the baker rubbed the sweet grain in a saddle-shaped rock or quern, with a small hand stone, as American Indians ground their sweet corn. In larger communities, the public miller was a busy man, operating the tremendous millstones we see in illustration 193. Asses turned the stones. Mills found at first century Pompeii and at Ostia indicate large-scale business requiring large grain warehouses, or *horrea*.

Bible references to millers are various. Moses spoke of "the maid-servant that is behind the mill" (Ex. 11:5). Samson ground grain in his prisonhouse (Judg.

16:21). Jesus in his Parable of the Judgment spoke of two women grinding at the mill, one of whom would be taken, and the other left (Matt. 24:41). Millstones were proverbially hard and heavy—especially the lower stone. Three of the Gospel writers quote the words of Jesus: "It were well for him if a millstone were hanged about his neck, and he were thrown into the sea, rather than that he should cause one of these little ones to stumble" (Luke 17:2).

BUTCHERS

Butchers were usually men of the household. In larger settlements they killed sheep, goats, and cattle on a large scale and, to sell the meat, hung it on hooks in public places. In spite of flies, eastern meat is often clean and safe, for at least Jewish butchers still conform to the Old Testament rules prohibiting sinew and unclean knives in killing fowl, etc. Yet western appetites often flag after strolls through the meat caves of Jerusalem or Damascus.

CATTLE-BREEDERS

Breeders were prominent in Egyptian and Mesopotamian life. Upon their prosperity Egyptian and Babylonian fortunes were based. Earliest Egyptians were themselves herders and shepherds, although in their more refined dynasties, lowly animal herders were an abomination. When Hyksos and Hebrew shepherds and horsemen flowed into their Delta, Egyptians forgot their own humble past. Egypt's great cattlemen raised herds near what is now called "Dar Fur," and even today this region exports to the Sudan. Cattle-breeders were wild and indifferent to law, ferocious, cruel, and murderous on occasion. They worshiped, naturally, bulls—the Apis bull at Memphis, Mnevis at Heliopolis, Osiris himself in the guise of the "Bull of the Other World." They paid homage to the cow, Hathor, whose cult goes back to the late Neolithic Age. Wall paintings and reliefs in Egyptian tombs reveal the prominence given to cattle-raising by breeders who fattened them, by turning them out in grass-producing deserts after the rainy season.

Nomadic Hebrew patriarchs were rich in cattle, for whose control their herders contended. This caused Abram, lover of peace, to suggest to his nephew Lot that they separate. "So Lot chose him all the Plain of the Jordan. . . . Abram dwelt in the land of Canaan" (Gen. 13).

CONFECTIONERS

Confectioners catered to the sweet tooth of the ancient East. We have seen them selling their wares on old stepped David Street of Jerusalem and distributing their cocoanut and gum-arabic candies in bustling streets of modern Damascus. Hard-candy balls flavored with anise and licorice are as much coveted by small boys in Bible lands as in America. "Pannag," mentioned by Ezekiel as being exported from Judaea, together with honey, to Phoenician Tyre (Ezek. 27:17), is thought to have been one variety of candy. The palace staff of every Babylonian and Egyptian king included candy-makers as well as pastry-cooks. Fruit-and-honey cakes and buns of all sorts were in demand for private tables as well as for funerary offerings.

FISHERMEN

Among food-producers in Bible lands, fishermen were of basic importance. Details of their technique appear in our picture 188. All along the coasts of the Mediterranean where the Great Sea washes Egypt, Palestine, Syria, Greece, islands of the Aegean, and Italy, nets were in ancient times, as they still are, both picturesque details of scenic beauty and practical factors in community life. The Nile was an abundant producer for Egyptians, and when the great river became polluted and "the fish that were in the river died," it was woe, indeed (Ex. 7:21). Tigris and Euphrates fishermen helped feed the lands "between the rivers." The Jordan, its confluent, the Orontes, and the Leontes sent supplies of fresh fish south to the entrance of the Dead Sea, but these chemical-impregnated waters soon proved fatal. Lake Huleh in northern Galilee and the Sea of Galilee itself fed from the upper Jordan, teemed with palatable fish. The Bethsaida on the northern shore, where the Jordan entered

the Lake, and also the Bethsaida on the northwest shore at Tabgha near the Seven Springs were the best fishing grounds of Palestine, and still are. We have tasted their hauls at breakfast time.

It is in line with natural facts that the fishing scenes in the Gospels are located at this heart of the Galilee fishing industry, which not only provided local food but shipped fresh and salted fish great distances. The first fishermen-disciples were not poor men but part of a well-organized industry.

The Gospels furnish us with illustrations of the four principal methods of fishing long used in Bible lands. The casting net was being used by Peter and Andrew somewhere between Capernaum and Tabgha when, "walking by the sea of Galilee, [Jesus] saw two brethren . . . casting a net into the sea; for they were fishers. And he saith unto them, Come ye after me, and I will make you fishers of men. And straightway they left the nets, and followed him" (Matt. 4:17-20). This type of casting net is draped on the arm of the fisherman who stands on the shore or wades into the water, as we have seen fishermen doing off ancient Sidon. Then it is skillfully whirled around and allowed to fall in a tent shape or cone; its lead weights pull it to the bottom so that it encloses fish. Sometimes the fisherman dives down, encloses the bottom of the net, and drags it ashore. Then after emptying the contents and sorting what he wants to keep, he washes and dries his valuable nets and sometimes hangs them on trees. He also keeps constant watch for rips and mends them as soon as they are discovered. James, John, and their father Zebedee were mending nets when Jesus called the two sons, who left their father in the boat and "followed him" (Matt. 4:21, 22). Small boys are taken along to frighten fish by throwing stones, and thus to prevent escape near the ends of the boat (illus. 188).

The second widespread method of fishing was by the drag net, a variety of which is seen in illustration 188. This might have been the type of seine, with floats along the top and weights around the bottom, mentioned by Matthew in Christ's Parable of the Kingdom of heaven (13:47-

50) which was "like unto a net, that was cast into the sea, and gathered of every kind: which when it was filled, they drew up on the beach; and they sat down and gathered the good into vessels, but the bad they cast away." The drag net was used by the discouraged disciples whose boat Jesus had used as a pulpit in teaching the multitude on the shore of Galilee. After the sermon Jesus asked Simon to "put out into the deep." The tired fisherman murmured, "Master, we toiled all night, and took nothing." Yet he obeyed his superior and helped let down the great seine into deep water. Before long, "they inclosed a great multitude of fishes; and their nets were breaking," so that they had to call their partners with another boat (Luke 5). The drag net when worked from two boats, enclosed the fish effectively, we learn from our accurate Gospel narrative. The draught was so tremendous that the two small boats began to sink. When they were finally beached safely and the great market was within site for profit, the fishermen-disciples were so overwhelmed with the mastery of Jesus that they cared nothing about the fish they had been so anxious to catch; "they left all, and followed him." The hungry people of the lakeside must have helped themselves to a free mess of fish that eventful day.

A third method of fishing was by casting hook and line from the shore, as Jesus suggested to Peter when they needed a coin to pay their half-shekel Temple taxes. The payment by Jesus and the disciples of this tax required of all Jews was a matter of burning controversy in their day. When Capernaum tax-collectors came asking for payment, Jesus explained to Peter that they, engaged in a greater work than that of earthly governments, could claim exemption from this tax. But to avoid notoriety and to prevent others from stumbling, they would, nevertheless, pay it. Therefore, he told Peter, "cast a hook, and take up the fish that first cometh up; and when thou hast opened his mouth, thou shalt find a shekel," a sufficient sum to pay the tax for Jesus and Peter. Shall we be so literal as to believe that the fish actually had a coin in its mouth, a situation contrary to Jesus'

usual avoidance of magic, or shall we understand that Peter sold the fish for a shekel and gave this for the tax?

Isaiah refers to casting angle in the Nile and to spreading nets "upon the waters" (19:8). Ezekiel mentions the fish of the Mediterranean (38:20); so, too, Hosea, lamenting the taking away of this good food supply (4:3).

A fish was one of the cheapest yet most welcome gifts in Bible lands. In his teaching, Jesus made use of this fact. "Of which of you that is a father shall his son ask . . . a fish, and he for a fish give him a serpent?" (Luke 11:11)

A fourth technique involved standing on the shore or in a boat and spearing a fish with a harpoon or a trident while torches were held over the stern to attract the fish. We have seen fishermen thus engaged in the swirling Strait of Messina on starry nights. Spearing was popular in Egypt. In the Cairo Museum we have seen statues of a fishing party of young King Tut-ankh-amun, standing with spears poised, ready to hurl. Job mentions bands of fishermen who cast fish spears, and try to pull the crocodile ("leviathan") out of the water "with a fishhook."

The story of the boy whose lunch of five flat barley loaves and two small fishes was used by Christ to feed a multitude became vivid to us one morning. Just at sunrise we were walking along the lovely shore of the Sea of Galilee, whose tiny shells sparkled in the first rays of the new day. Far out on the lake we saw a boat, still in search of haul. As we stood waiting for it to come in, a small lad suddenly appeared from a clump of olcanders. He stood silently watching us. His dark-red curly hair and garments, graceful even if "cast off," made us christen him at once the "boy of Galilee." In his right hand he had a small loaf of fresh-baked barley bread; and in his left, a tiny speckled fish he had easily caught by wading out into the warm waters of the lake. We were startled to find him such a perfect replica of the boy mentioned in connection with Christ's miraculous feeding of the hungry multitude in this vicinity of Tabgha, whose seven warm springs have always made it a rich fishing ground. This bronze-faced, curly-haired eight-year-old boy, son of a

farmer bedouin living in a tent on the adjacent Plain of Gennesaret, appears in illustration 180.

George M. Lamsa suggests that the real miracle of the loaves and fishes occurred when those who had brought in their girdles a reserve supply were impelled by the mastery of Jesus to open up and share, each with his neighbor. Thus food suddenly appeared for thousands of hearers. This explanation would still include our boy in the miracle. We are sorry that Matthew, Mark, and Luke delete the lad from their record. They make it appear that the disciples already had the loaves and fishes in their commissary when questioned by Jesus. John alone gives the boy a square deal and credits him with providing the basic materials for the miracle: "There is a lad here, who hath five barley loaves and two fishes" (John 6:9).

The daily miracle of God's provision of abundant fish for hungry people in Galilee was made pleasantly real to us that morning when we were served for breakfast in our lake-side hostel some fresh-caught "St. Peter's fish," small, but delicious.

For the exquisite art portrayal of the incident of the loaves and fishes, see in illustration 65 the mosaics discovered in the Church of the Multiplying of Tabgha.

The last fishing scene figuring in the life of Jesus involved the use of a large casting net, the *diktuon*, described in John 21:6. To this, Peter and the discouraged fishermen, who had left all to follow one who proved to be their crucified leader, the company including Thomas "the Twin," Nathanael of Cana, James, John, Peter and two other disciples. All night they caught nothing. Toward dawn they saw a figure standing on the beach, and at his suggestion they cast the net on the right side. They had to call another small boat manned by "the other disciples," for the net was full. Peter, after John had whispered the secret, recognized his Lord as they approached land, and he leaped into the water to swim ashore. See the eager swimmer in illustration 188. For a mystical shore feast Jesus kindled the fire and served the fish and bread. Here he was the beloved host again, as he had been in Jerusalem.

Fish were sold in great quantities at Jerusalem, whose market for sea foods was near the Fish Gate mentioned by Nehemiah. To it were brought hauls from the Phoenician Mediterranean coast thirty miles away and from Galilee seventy miles north.

Perch, carp, bream, and the small "St. Peter's fish" are common varieties among the many species mentioned by Tristram. The "sheet fish" is the one most often cast away from the haul of the drag net, as dogfish are by Cape Cod fishermen. Eels and unscaled water animals were "unclean" to Hebrews (Lev. 11:9-12).

FRUIT-GROWERS

The tree husbandmen mentioned in Flowers, Herbs, Trees, and Other Plants and the grape-producers discussed in Viticulture brought their fruit treasures in to the pantries of towns and royal households.

MILKMEN

Milkmen of Bible lands for centuries have driven their goats to doors of homes, milking the warm and popular liquid into containers provided by the housewife. Pasteurized milk is also now on sale in new Jerusalem and is distributed to babies at the health center established by the Brooklyn benefactors of Palestine, Nathan and Lina Straus, who first introduced pasteurized milk into Jerusalem and thus reduced infant mortality. Families owning domestic animals are provided with their own milk.

METAL-WORKERS AND MINERS

"The smith maketh an axc, and worketh in the coals, and fashioneth it with hammers, and worketh it with his strong arm . . . is hungry" (Isa. 44:12). In these clear words a master of Hebrew literature paints a picture of the metal smith of Bible lands. See a Syrian smith in illustration 190.

TRAVELING SMITHS

Everyone interested in metallurgy will find a challenge in the numerous biblical

allusions to ores and their refining. The first book of Scripture introduces Cain, whose name means "smith," or "miner," and whose descendant, Tubal-cain, was the original "forger of every cunning instrument of brass (or 'copper') and iron" (Gen. 4:22). Throughout Bible times, the traveling smith, who went from one community to the next where his skill was needed, making cooking utensils, vessels for the wine press, containers for dyes, hoes, and other tools for farmers and masons, and shoes for horses, was a carrier of news. From such persons there gradually filtered into western Palestine word that east of the Jordan, south of the Dead Sea, in the weirdly formed geological region called the Wadi 'Arabah, there were mountains richly stocked with iron and copper. The largest was at Mount Menc'iyeh, thirty-eight kilometers north of the Gulf of 'Aqabah at the head of the Red Sea. As Nelson Glueck points out in his authoritative *The Other Side of the Jordan*, Chapter 3, long before Israelites came to Transjordan, Kenites, one of whose women Moses married, and Edomites knew of the rich ore deposits in their highlands. Some of the smiths of the Kenites probably first told Israel about the rich possibilities of metallurgy. Tubal-cain was a Kenite and was at home east of the Jordan in Edom and in the Wadi 'Arabah. From I Chronicles, as Glueck points out, we learn that the Kenite metalworkers lived in the Valley of the Smiths, whose City of Copper may be the vast Iron Age mining center of Khirbet Nahas, or Copper Ruin, at the north end of the Wadi 'Arabah.

The itinerant tinker-smiths continued to play an important role throughout Bible history. Today in Iran they persist under the name Sulaib, as Ernst Herzfeld points out in his *Iran in the Ancient East*. They are despised wayfaring people, wearing on their foreheads a T-shaped cross, which in ancient Accadian cuneiform denoted "God" or "iron." Is this "the mark of Cain"? Herzfeld sees Cain as a metallurgist, and Tubal-cain as a skilled smith, working after the techniques of hammering and hardening had been learned. He sees in Cain's offspring not heads of tribes but founders of trades and crafts.

Albright, in *Archaeology and the Religion of Israel*, states that traveling smiths of Arab Arabia, whether Sulaib or gypsies, show us how biblical Kenites traveled. They took along asses, bellows, and tools, living by their craftsmanship and the income gained by music and their women's fortunetelling. Albright believes there are grounds for thinking that the ancestral Hebrews were, in part, at least, related to such groups, traveling with their weapons, bellows, and musical instruments.

Even in Greece, traveling smiths were familiar figures. Homer gives them a place in his epics of the Mediterranean world. As Herzfeld points out, places in Eurasia, not otherwise connected, had a basis of common interest through mining and smith work. Wayfaring prospectors, dealers, and craftsmen traveled all over the Middle East, starting trends which in time assumed local characteristics in developing the metals.

MINERS OF COPPER

As early as the Book of Deuteronomy, the Promised Land is described "as a land whose stones are iron, and out of whose hills thou mayest dig copper." Moses and his followers had in their wanderings up from Egypt passed through the great Egyptian copper- and turquoise-mining section of Sinai, evading Pharaoh's troops who guarded the mines but possibly coming into contact with their writing system. The Children of Israel saw mining both in Sinai Peninsula and in highlands where they wandered before entering Canaan. This section was important during the great Chalcolithic Age, the 1,000 years between the Neolithic and the Early Bronze ages.

The Old Testament gleams with references to metals—iron, gold, silver, and especially "brass," which should be translated "copper" in most instances. According to Burrows, brass was not known until Roman times. Moses ordered offerings for the Tabernacle to be made of copper. Cast from this metal, too, were sockets for its doors (Ex. 26:37), the network grating, pins, vessels for the altar, shovels, flesh-hooks, and fire pans (Ex. 38:3). Mirrors for the ministering women who sat at the

door of the tent of meeting were to be of copper. The horns attached to the altar were overlaid with copper, soft enough to work easily. Moses' serpent of "brass," really of copper, might have been fashioned by his relatives by marriage, the Kenites east of Jordan. David, who took much copper in booty, in his earliest days was unafraid of Goliath, equipped wholly with copper armor. Job, living in Edom or Midian, the land of mines, wrote authoritatively (28:1, 2):

Surely there is a mine for silver,
And a place for gold which they refine.
Iron is taken out of the earth,
And copper is molten out of the stone

Zechariah referred to "mountains of copper" (6:1). Throughout Scripture, metals are not only valued but admired for their beauty. Ezekiel mentions in his vision the sparkle of burnished brass (bronze), and John of Patmos sees cherubim with feet of fine copper.

But the outstanding mine centers of the Bible were David's and especially Solomon's in the 'Arabah. The greatest copper-mining and -smelting developments of Bible times took place in the Iron Age of the Hebrew monarch. David, by conquering Edomites, gained a foothold which his son Solomon wisely followed up to its full commercial possibility. When the Temple was ready to be fitted with beautiful furnishings for worship, there was plenty of copper to be cast by Phoenician metal-workers down in Jericho Plain between Succoth and Zaretha, where clay and water were abundant for molds. The molten sea of I Kings 7:23 may have been of cast bronze. Some authorities believe it was of copper. So, too, the bases for the sea and the wheels for the platform, as well as the lavers, shovels, and casings, were probably of bronze, a hard alloy of copper.

It is easy to read into the struggles between Edom, Israel, and Judah a contest for the copper ores of the 'Arabah. Nelson Glueck, in several years of exploring Iron Age sites of Transjordan from 1934 to date, has opened up a hitherto unknown chapter of an important industry of Bible times. He has explored such mighty fortresses as Khirbet Hamr Ifdan of the period

of the kings of Judah and Israel in the Iron Age; this fortress was built to guard the approach to mining and smelting furnaces. Glueck has come upon ruins of miners' huts, walls, slag-heaps, and a prison camp for imported slave labor. He has found pottery-strewn mining sites all the way from the Dead Sea to the Gulf of 'Aqabah, where his most interesting find was Solomon's "Pittsburgh," Ezion-geber. A city gate of this smeltery and shipping port appears in illustration 34. This long-sought Tell Kheleifah, found by Glueck and his expedition in 1938-39, was on a none-too-good site, except that it had sweet-water wells and adjacent date-palms for food and shade. One mud-brick house had ten rooms—a home unlike any other yet found in Bible lands. From this port, whose smeltery flues took advantage of the draft up the Wadi 'Arabah, Solomon not only secured copper for his Temple and palaces at Jerusalem but also exported it in trade for products of southern Arabia, Egypt, and Sinai. Once every three years, his "Tarshish ships" made round trips to Ophir, bringing back cargoes of gold, algoni trees, precious stones, apes, ivory, and peacocks. Read the firsthand account of I Kings 9:26-8: "King Solomon made a navy of ships in Ezion-geber, which is beside Eloth, on the shore of the Red Sea, in the land of Edom, . . ." Albright interprets the "Tarshish ships" of Solomon as probably "refinery fleets," copied after ones already plying the Mediterranean to connect the mines and refineries of Sardinia with Phoenicia, and possibly mines in Spain with the eastern coast of the Great Sea.

In Num. 33:35-36, we read of the wandering Children of Israel encamping at Ezion-geber, on their way to the next camp in the "wilderness of Zin (the same is Kadesh)." The Ezion-geber they saw, several centuries before Solomon's developments here, was probably a group of palm-shaded mud huts, hugging the sands above still-ungessed mineral wealth.

After the conquest, the tribe of Benjamin was allotted territory bordering the 'Arabah, whose ancient name, coming from the Hebrew meaning "Desert-plain," lives today.

One of the most sensational facts in

connection with mining in ancient Bible times has to do with the "invention" of Hebrew writing in the most unlikely place—at the turquoise mines of Serabit in the wild fastnesses of copper-veined hills of the Sinai Peninsula. As Sir Flinders Petrie discovered in 1904-05, Egyptians had early imported, from Midian and Edom across the Gulf of 'Aqabah, miners whom they enslaved first to the copper mines. Then the slaves were put to work in the more famous turquoise mines prized by rulers from the First Dynasty on, including Queen Hatshepsut (1504-1482 B.C.). In mining centers operated before and during the era of Moses and his trek through Sinai, there were not only high places and temples suggesting Hebrew rather than Egyptian worship among the miners, but examples of script cut on sphinxes and rock walls of the mines, in "the oldest alphabetical writing in the world." This writing was older than the Phoenician alphabetical writing in cuneiform characters used c.1400-1350 B.C., which we have seen on the Ahiiram sarcophagus in the new Beirut Museum. Sinai mines indicate that alphabetical script, at the time when Moses was in Sinai, was used even by "illiterate" miners and was carried by Moses into both Palestine and Phoenicia. At least, this is the belief of Sir Charles Marston, who also thinks that Joshua used the Sinai Hebrew script and was able to carry out Moses' command to write on stones "all the words of the law" (Deut. 27:2-8). It is not unlikely that the miners of Sinai had admired the hieroglyphic writing of their Egyptian masters and worked out an alphabet with which they, too, could express their thoughts.

Petrie believed that copper was the earliest metal used in Egypt and that bronze was not an intentional alloy before the Eighteenth Dynasty B.C. First Dynasty Egyptians fought Sinai Peninsula people to control peninsula copper mines. Lead was known in prehistoric times but was not widely used in Egypt. In the early Amratian age of Egypt, small copper chisels or drills appeared. A heavy type of axe came with the First Dynasty. Afterwards, copper, from the mines of either Sinai or possibly Cyprus, which still produces

richly, became common. Egypt made certain articles by hand-beating soft copper. We have seen this same craft practiced in the metal-stalls of Damascus, where men and boys hammer all day long (illus. 190). For copper casting, open molds were set in the ground near the movable charcoal-fired kettle, from which the molten metal was poured through a side spout. During the smelting an ingenious double bellows was used. It was made of skins inflated by a system of foot-pumps and strings, which kept air pouring in from reed pipes with clay nozzles.

In Egypt of the Pyramid Age, from the middle of the thirtieth century B.C. to the middle of the twenty-fifth century B.C., metal-workers were producing ingenious ripsaws, for splitting planks, for example. These saws, often 6 ft. long, were of copper. Saws for cutting the one-ton blocks of stone for the pyramids were in common use. And quantities of drainpipe also utilized copper. Her gold, Egypt secured in vast quantities from the Land of Punt, on the coast of East Africa, in exchange for bartered beads, fruits, grain, jewelry, weapons, and other Nile products. To make one solid-gold mask or coffin for a Tut-ankh-amun, long bargaining on both sides of the beach was necessary.

Egyptians made their god Ptah responsible for the success of smiths, metal-workers, and artists.

IRON SMELTERS

Iron-workers of Bible lands may be indebted to Philistines for introducing their ore into Palestine; or to Achaeans; or to smiths of mountainous Anatolia. At any rate, iron was widely used in Palestine a century before it was common in Europe. It was abundant in the era of David and Solomon. Nehemiah refers to iron from the north. René Dussaud, in his *Monuments Palestiniens*, gives Canaanites from the northeast tip of the Mediterranean credit for introducing the industrial age into Palestine; Canaanites perhaps received the innovation from Aegean influences. Certainly Greece was mining silver at the Laurion mines near Cape Sunium at an early date; it continued to do so in the centuries when the finest silver coins were

being minted at Athens, Corinth, and other prosperous Greek cities. Laurion mines today can still supply good ore and carry on profitable industry in times of peace.

Israel in the period of the judges and the early monarchy looked with envy and dread upon the smelteries of the Philistines along the coastal plain, especially at Gerar. The Petries discovered there four iron furnaces and a factory for swords. In this same vicinity they located chisels, spearheads, daggers, and other weapons, some of which go back as far as 1300 B.C. Such discoveries as these give material foundation to I Samuel's statement that manufacture of arms was forbidden to the Hebrews by the Philistine monopolists. The Israelites were required to come down to their enemies to have their plowshares, colters, axes, and mattocks sharpened. Only King Saul and Prince Jonathan, not the people at large, had swords and spears. Under David, weapons became more available (see *Defense*). The Early Iron Age ran from about the thirteenth or twelfth century B.C. to the seventh century B.C. David reigned from 1013 to 973; and his son Solomon, from 973 to 933 B.C.

As for David in the Iron Age, we see in I Chron. 20:3 mention of his saws, harrows, and axes of iron. Of the materials he turned over to Solomon for the building of the Temple we read: "David prepared iron in abundance for the nails for the doors of the gates, and for the couplings" (I Chron. 22:3).

In *Babylonia*, in the earliest period of which we have record, smiths made distinctive flat chisels with pointed butts, battle-axes with cast shaft holes, unique double axes, and straight saws. There may be a connection between this work and the crafts of the early Caucasus, for in that northern region, and in the Pontus, metal work began as soon as ores were discovered. Western Asia was making copper mirrors in the First Egyptian Dynasty. Mesopotamia was hammering such vanity accessories before that. Egypt seems to have derived her metal-working ideas not from Sumeria but from some other source.

Iron, as Petrie pointed out in *The Wisdom of the Egyptians*, was not smelted in

Egypt, although it was in Syria, before 1300 B.C. In steel work Syria later became famous through its damascene blades. In Greek settlements iron was common before 600 B.C.

It has been suggested that Damascus steel was hardened by treatment with camel's dung, as modern steel is heated in an atmosphere of ammonia to form a thin layer of nitrogen-bearing surface steel. Nahum (2:1) refers to Persian chariots that flashed with steel.

For many decades the Hittites controlled the chief iron supply of Asia Minor, the Taurus Mountains. This metal had been known in Crete since early times. And some smiths, whatever their habitat, were in the fourteenth century B.C. making fine daggers, if we can judge by the one in the Cairo Museum which belonged to Tut-ankh-amun.

Workers in other sorts of metal, such as gold, silver, and electrum, are treated elsewhere in this book, under *Business Transactions*, *Defense*, *Jewelry*, etc. Our picture of the copper-smith in his small booth at Homs in Syria today (illus. 190) might have been made in any land of the Bible during the past 4,000 years. His gleaming wares always tempt us by their shining beauty, but we can never think of any use to which we can put them at home. They are better left for the everyday tasks of eastern families. Such a purchase by a man and woman for their household is an event.

Glueck, who not only has revealed new archaeological riches by his studies of the Wadi 'Arabah but has investigated its economic possibilities for the future of Bible lands, says that, in spite of heavy mining during the Iron Age, the copper deposits of the wadi are far from exhausted. However, modern mining would require investment of large amounts of capital, for railroads, water supply, refineries, and workers' settlements. As in the time of Moses, Transjordan is still a God-given, goodly land "whose stones are iron, and out of whose hills thou canst dig copper" (Deut. 8:7-9).

POTTERS

See *Arts and Crafts*, pages 110-16.

SHEPHERDS

See Animals. pages 31-36.

SHOEMAKERS AND LEATHER-
WORKERS

Shoes seem to have been in vogue in the golden Eighteenth Dynasty of Egypt, from which survive royal sandals. Long before that, Egyptians had been using leather for wrappings, bags, and armlets which they may have copied from Nubians and Hyksos horsemen. Rope was sometimes made of leather; and network garments, of leather to save linen loincloth and waistcoats. Battle shields were often of leather stretched on frames.

WEAVERS AND DYERS

"By their trade they were tent-makers," or tent-cloth weavers. Thus runs the record of the Jew from Pontus named Aquila and his wife Priscilla, whose partner Paul became at Corinth. The trade they plied was ancient, almost as ancient as that of the herdsman and farmer. Paul had learned its secret as a boy in Tarsus, whose rough cloth, called "cilicium" after the province of Cilicia, was exceptionally strong; for it was of durable goatshair, from flocks which grazed in the cold Taurus Mountains in long winters.

Nomadic society in all Bible lands wove its own textiles, from coarse tent cloth to warm woolen garments for the family (see Apparel, p. 59). As in India today, a degree of independence was maintained when a household had means of livelihood through its weaving. But there were also commercial guilds who were specialists in this skill. Of these craftsmen we have relics in fragments of wooden looms and dyeing vats excavated at Lachish in southern Judaea. They may have been used c.1100 B.C. As Marston indicates, some of the homes ruined by Nebuchadnezzar contained clay loom weights. Near-by were dye vats. There is also evidence that 1,000 years before Abraham's time Canaanites were weaving fine textiles. At Tell Beit Mirsim, called Kirjath-sepher there were many loom weights, and the latter place bears evi-

dence of an elaborate setup for cloth production. Remnants of a dyeing establishment have been found in Ugarit; from piles of murcx shells purple-red dye was extracted in this land of clever Canaanites. In ancient Sumer, the weaver's apprenticeship lasted longer than a seal-cutter's six years of learning. No wonder Mesopotamian mantles were stolen from battlefields because of their beauty. A Babylonian ruler of c.2320 B.C. had his own factory for woven materials. Egypt developed famous weaving centers and exported far over the Mediterranean not only linen, which Petrie said was as fine in the First Dynasty as our handkerchief linen, but also the heavier quality used for wrapping mummies and for making the huge fringed sheets which constituted part of a man's wealth. For palace hangings and sun-awnings, Egyptian looms wove heavier cloth with red background; the wool introduced blue, yellow, and light green. Many temples had their own textile factories.

Phoenician Byblos, on the Mediterranean coast between Beirut and Tripoli, was not only a book-making center utilizing Egyptian papyrus but was noted for its woven cloth and garments. These were widely distributed by Phoenician and Egyptian traders.

Philistines and Hebrews both must have worked their looms busily in the period of judges, for Samson proposed as stakes for answering his riddle "thirty linen garments and thirty changes of raiment" (Judg. 14:13). The thrifty woman of Proverbs spun, with her own *distaff* and *spindle*, wool for her hand-loomed tapestries, clothing for her family, and girdles and garments sold to Canaanite wholesalers. Often in Palestine and Greece today we see women walking along roads, carrying under their arm a large bundle of new-cut wool, which they twist and twirl into yarn by deft manipulation of the dangling spindle (illus. 192). Stone and bone spinning whorls from the Early Bronze Age and later have been found in Palestine. Whorls were discs to steady moving spindles.

Weaver's beams (I Sam. 17:7) have been excavated on biblical sites. Canaanites were not only weavers but embroiderers

(Judg. 5:30), and from them, Israelites borrowed techniques and designs. Weavers who, as a class or guild, concentrated in certain communities increased their skill. Even isolated, unlettered bedouins became proficient in turning out from their looms coarse goatshair cloth excellent for storm-proof mantles and tents. We have bought admirable embroidered cloth at Bethlehem from unskilled Arab women who still ply an ancient trade.

A homemade loom was made with two wooden uprights set in piles of mud under trees for summer use, or on an earthen house floor for winter. People thoroughly enjoyed taking their places before the loom, with their feet in pits or curled under, in the position of the man in illustration 191. It was quite an event when he strung his loom with long warp strings of hemp, cotton, or silk. This was the first step in weaving the long strip of cloth which, when sold at the nearest bazaar, would feed him for months. The wider the cloth desired, the more threads were placed in the warp, or the farther apart they were strung. Between the upright threads, horizontal ones, or weft strings, of sheep's wool or goatshair or camel's hair or silk were inserted by a shuttle drawn between the warp threads, which were separated into two sets by the *heald*. A reed, batten bar, or large comb pushed the weft firmly down; then more threads were passed through. Rows of colored wools or silk were introduced to enliven the pattern of the cloth used for tents, garments, or draperies.

CARPET-LOOMING

Many countries in the Near East have for centuries been hand-weaving their rugs or couch carpets on looms, and then perfuming them. A Hebrew Proverb (7:16) runs:

I have spread my couch with carpets of
tapestry,
With striped cloths of the yarn of Egypt.

Today in Bible lands rugs are made by women and children (and by men in winter). Clever fingers of little girls take tiny wisps of varicolored yarn and tie knots in the warp threads, following from memory

or from a finished rug the patterns and colors used in their families for years. The greater the number of knots per square inch, the finer the carpet. To make a good oriental rug has always been difficult. The more borders, the more beautiful. Each region has its own designs: the Iranians use many leafy trees and fountains and garden paths; the Chiordes people make prayer rugs; the Shiraz folk use Kashmir stripes and diamond-shaped medallions.

The Bible refers many times to rich materials from looms, used for hangings and curtains in palace and synagogue and temple. The Book of Judges tells of people "who sit on rich carpets." Exodus refers to the priests' garment, or *ephod*, of "gold, blue, scarlet, and fine twined linen, the work of skilled workmen." Men who lived in kings' houses had "soft garments." The poor had rough ones. Jesus had a seamless robe, for which Roman soldiers gambled at the foot of his cross. Perhaps it was of white wool, woven by his mother on a loom at Nazareth. Often the natural colors of wool were retained—gray, white, cream, black, brown. Camel's hair makes the warmest and lightest of cloaks; goatshair, strong, warm blankets and tent cloth, often in black and gray stripes. To the tiny silkworm, formerly grown on large scale in the mulberry orchards of Syria and Lebanon, silk-weavers for centuries have been indebted. Broad looms, operated by girls and women in dark lofts of Damascus, still weave the wide silk-and-metal-thread fabrics, in lovely reds and blues and amethysts, used for the *aba*, or seamless robe.

Hebrews were better at *dyeing* than at almost any other art-craft. Their rich and permanent colors were derived from *murex* shells near Tyre, supplying purple-reds, and from vegetable dyes. The latter are still used in ancient Hebron, although some European aniline dyes have filtered in. Vegetable madder and indigo have been used since early times. Some of the older craftsmen still recall how to make what Grace Crowfoot calls "an indigo vat," using potash, lime, and grape treacle. One madder formula calls for green grapes pressed with water. Washed wool is put into the grape juice, and powdered madder is sprinkled on top of it, to be left all night

without washing. Ashes of wood or goat's dung is used in the process. When yellow was desired in ancient times, almond leaves served. Pomegranate bark supplied black. Green was not popular but was sometimes secured by use of an umbelliferous plant with indigo. The bright sunshine of the East blended colors which otherwise would have clashed.

MISCELLANEOUS WORKERS

In addition to the above occupations, there are many others whose role in Bible life was fundamental. Yet they are seldom if ever mentioned in Scripture. They are assumed because they persisted for centuries and still persist: the camel driver;

the men who whitewashed walls and tombs, silent helpers of more prosperous toilers; basket-makers, to whom farmers were indebted, as are archaeologists today. The last mentioned also wove rush matting, used on floors and in screens for separating compartments of tents; sandals; and ropes of all kinds. House-painters; men who made metal gods and cases for them, many of which we see in museums today; specialists in children's toys—these played their part in building the social scene in Bible lands.

The ragged burden-bearer, or *hamel*, received his guerdon in the words of Jesus: "Come unto me, all ye that labor and are heavyladen, and I will give you rest" (Matt. 11:28).

ADDITIONAL BIBLE REFERENCES

"The harvest indeed is plenteous, but the laborers are few" (Matt. 9:37)

"They . . . delivered him up to Pilate the governor" (Matt. 27:2)

"And they said one to another, Come, let us make brick, and burn them thoroughly" (Gen. 11:3)

"So the carpenter encourageth the goldsmith, and he that smootheneth with the hammer him that smiteth the anvil, saying of the soldering, It is good" (Isa. 41:7)

"He causeth the grass to grow for the cattle" (Ps. 104:14)

"The words of Jehovah are pure words; As silver tried in a furnace on the earth, Purified seven times" (Ps. 12:6)

"The priest's lips should keep knowledge, and they should seek the law at his mouth; for he is the messenger of Jehovah" (Mal. 2:7)

"They that are whole have no need of a physician" (Matt. 9:12)

"Physician, heal thyself" (Luke 4:23)

"is there no physician [in Gilead]?" (Jer. 8:22)

"Jesus answered him, I have spoken openly to the world; I ever taught in synagogues, and in the temple, where all the Jews come together" (John 18:20)

BIBLIOGRAPHY

Breasted, James H., *The Edwin Smith Surgical Papyrus*, Vol. 3-4, Oriental Institute, University of Chicago, Chicago.

Crowfoot, Grace, and Baldensperger, Louise, *From Cedar to Hyssop*, Sheldon Press, London.

Garstang, John, "Hittite Military Roads in Asia Minor," *American Journal of Archaeology*, January-March, 1943, Vol. 47, No. 1.

Glueck, Nelson, *The Other Side of the Jordan*, American Schools of Oriental Research, New Haven.

Grant, Elihu, *The Peasantry of Palestine*, J. B. Lippincott Company, Philadelphia.

Herzfeld, Ernst E., *Iran in the Ancient East*, Oxford University Press, Oxford.

Jayne, Walter A., *The Healing Gods of Ancient Civilization*, Yale University Press, New Haven.

Mackie, George, *Bible Manners and Customs*, Fleming H. Revell Company, New York.

Marston, Sir Charles, *The Bible Comes Alive*, Religious Book Club, London.

Matthews, *The World in Which Jesus Lived*, Oxford University Press, Oxford.

Mendelsohn, I., "Free Artisans and Slaves," *Bulletin* No. 89, February, 1943, American Schools of Oriental Research, New Haven.

Petrie, Sir Flinders, *The Wisdom of the Egyptians*, British School of Archaeology in Egypt, London.

Wright, G. Ernest, "Solomon's Temple Resurrected," *Biblical Archaeologist*, May, 1941.

ROADS, STREETS, TRANSPORTATION

Prepare ye in the wilderness the way of Jehovah; make level in the desert a highway for our God.

—Isa. 40:3

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lon, Memphis, Amarna, Jerusalem	
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INTRODUCTION

ROADS AND "THE WAY"

Few things we can do today put us in such close touch with people of ancient Bible lands as walking on stretches of road they used. Fortunately, several such thoroughfares survive, despite thick deposits of debris from war and everyday living. Some of these fragments of once-thronged highways and streets are still in almost as good condition as when laid by skillful engineers 2,000 years ago. Through the pages and pictures which follow, we share with you some of these eloquent roads which endure, even though the cities they connected have disintegrated.

The Bible was written by journey-minded people. There was never a more

idealistic purpose behind a trek than the one which led Abram from Sumerian Ur to Canaan. There is no more romantic travel tale in the literature of the Levant than the courting of Rebekah and Rachel among "the children of the East." The anthology of road robberies through the ages has nothing to surpass the saga of Joseph enslaved on Dothan Plain. Psalmists who probably never traveled very far themselves longed for highways in deserts and saw God's way in the sea. Isaiah was forceful from personal experience with wretched Judaeen roads, when he cried, "The highways lie waste, the wayfaring man ceaseth. . . . Prepare ye in the wilderness the way of Jehovah; make level in the desert a highway for our God" (Isa. 40:3). In terms of straightened thoroughfares, tunneled mountains, and smoothed-out rough

places, the prophet saw the approach of the Messiah. Jesus called himself "a way," the Way, of truth and of life, as he told the inquiring road-seeker, Thomas (John 14:5). Paul immediately took over the terminology of the Way. And when people at Corinth spoke "evil of the Way," he separated his pupils from the synagogue group and led them into the school of Tyrannus. A tumult "concerning the Way" precipitated the riot against Paul at Ephesus (Acts 19:23). The author of Hebrews recognized Jesus as the initiator of "a new and living way" (10:20). John of Ephesus witnessed, "If we walk in the light, as he is in the light, we have fellowship one with another" (1 John 1:7).

The figure, used by Malachi, of a messenger sent onto a road to run before the master, driving away lurking highwaymen and announcing the arrival of his lord, is quoted by Matthew to explain the relation of John the Baptist to Jesus (11:10). Matthew was one of the most road-minded of the disciples, for he had witnessed in his tax booth along the Capernaum highway every experience that can come to travelers.

OLD TESTAMENT TRAVEL

The chart in illus. 194 taken from James H. Breasted's *Ancient Times* sums up graphically the chief means of transportation used in ancient Bible lands. Boats, four-wheeled chariots or wagons, carrying-chairs, or donkey palanquins led the procession from c.3000 B.C. and earlier. The wagon was represented at a recent scientific exhibition in Radio City as the world's oldest land conveyance. Excavations at Ur have revealed the four-wheeled carts used by Queen Shub-ad's court several centuries before Abram's years in that place. The solid-disc wheels with leather tires were probably familiar to Abram. In Gen. 45 there are three references to the wagons which Pharaoh instructed Joseph to send north to convey his father Jacob and his family. And "when he [Jacob] saw the wagons which Joseph had sent to carry him," he revived in spirit. Such a two-wheeled wagon carryall which we once

saw in Egypt laden with wives and "little ones" appears in illustration 195.

V. Gordon Childe believes that well before the fourth millennium B.C. wheeled vehicles arrived at the Mediterranean coast from the Indus region. At Tepe Gawra, in level VIII, a four-wheeled covered wagon came to light which may be our oldest depiction in art of a wheeled conveyance.

In rugged mountain terrain like that of Crete, early roads were so rutty that wheeled traffic was impossible, and elaborate palanquins became the favorite vehicle of the Minoan sea-kings when visiting ports on the north and south of their island. In Egypt, also, palanquins were popular for royal civilians such as Queen Hetep-heres, mother of Khufu, builder of the Great Pyramid (thirtieth century B.C.). The gold casing of her disintegrated wooden carrying-chair was found by Reisner's Harvard-Boston Expedition near the pyramid and is now restored in the Cairo Museum. A replica is in the Boston Museum of Fine Arts.

Peasants in Egypt used the hard little footpaths along their canals. Warriors went to battle in chariots. Hunters paddled to their reed marshes in papyrus boats. To ride a horse was distasteful to the refined man of Egypt. Grooms rode horses to the stables. Not for any purpose were horses used in Egypt until the Ilyksos introduced them there and in Syria. By the Eighteenth Dynasty they were common, and among Hebrews of Palestine they became popular in the reign of prosperous Solomon, horse-fancier and trader. The "new cart" mentioned in II Sam. 6:3 as transporting the ark was probably drawn by asses.

The horses on which Persian warriors prided themselves came from the rough, cold mountains south of the Caucasus and the horse-breeding "land of the Mitanni." For their prisoners and war material, Assyrians used baggage wagons.

The backs of porters were a common conveyance for unbelievably heavy burdens, down to modern times. We have seen *hamals* bent almost double under loads of fresh summer grapes which they were "expressing" from Hebron to Jerusalem markets on David Street.

THE PATH OF THE PATRIARCHS

When Abram and his clan moved north from Ur in lower Babylonia to Canaan, they probably grazed northwest along the Euphrates—river valleys made easier going for their animals—to Haran, which was at the arch of the Fertile Crescent. The animals of this migration of Khabiru from moon-worshipping Ur to moon- or Sin-worshipping Haran, and probably through what became Carchemish, literally ate their way around this trail of productive land. They grazed ultimately to Syrian Hamath, south to Shechem, Beth-el, and finally to their nomadic headquarters at Hebron, south of Bethlehem. Some of the Abram tribes ranged near Damascus and east of the Jordan. When they halted at Haran, they were only a few miles southeast of what became Edessa (Urfa), earliest center of Syriac-speaking Christianity.

We must not picture the patriarchal tribes as arriving necessarily by camel caravans, such as are indicated by Gen. 12:16. Delightful as this majestic detail makes the narrative, set up with imposing stateliness in Tissot's water color of this procession, we may be compelled to substitute the homely but practical ass for the camel. For the latter was not domesticated until about the eleventh century B.C., if we accept Albright's chronology. Since the dawn of history, asses had been bearing man's heavy burdens, slowly plodding out of Mesopotamia and penetrating far with their cargoes. The tiny donkey tied at the door of a home on a stone-paved Bethlehem street today suggests a side light on Mary's flight to Egypt. The veiled man seen in the distance could be Joseph.

"GOING DOWN TO EGYPT"

Time and again in Old Testament narratives we read: "And there was a famine in the land: and Abram went down into Egypt to sojourn there; for the famine was sore" (Gen. 12:10). Again, "all countries came into Egypt to Joseph to buy grain, because the famine was sore in all the earth" (Gen. 41:57). Or, Jacob said unto his sons, "I have heard that there is grain in Egypt; get you down thither, and buy for us" (Gen. 42:1, 2). Such hungry

groups often followed the soft path along the great Plain of Sharon lining the blue Mediterranean with green, to a point near Gaza. Beyond, they came to palm-dotted oases of dates and such matchless strips of shore between white herringbone sand dunes and sapphire surf as set us into ecstasy every time we travel this beautiful coast at the southeast corner of the ancient sea. After passing the reedy clay pan of Bardawil Lake (see below, route of Exodus) the patriarchal company could have crossed the Isthmus of Suez as we today cross the Canal, at Kantara or possibly at Ismailia.

Sir Leonard Woolley and T. E. Lawrence, in the *The Wilderness of Zin*, favor the overland route for the patriarchs, who they think avoided Gaza and the coast. Their successors in later centuries avoided this same strip when it was dominated by "unsympathetic aliens" such as the Philistines. But see the theory of Jarvis (p. 360).

Joseph, Mary, and Jesus on their flight from Bethlehem to Egypt probably rode through Hebron, across the Desert of Beersheba to northernmost Sinai Peninsula and along the sea path into the Delta. If they were fortunate enough to have borrowed either a donkey or a camel, or to have hired one from the carpenter's wages, their journey had in it much that was beautiful.

THE MOOTED ROUTE OF THE EXODUS

Woolley and Lawrence mention three thoroughfares through northern Sinai which were highways of destiny as migrating populations and armies moved up and down from Asia to Africa by way of Palestine. The coastal "commercial road" ran through busy Gaza (illus. 96), El Arish, and Rafa, a line which today is the border between Egypt and Palestine. Portions of the second routes, through Maan in Transjordan to 'Aqabah, seem indicated in Exodus as the way used by the migrating Hebrews. The third was suggested above as the one followed by Abraham, and also by Isaac, from Hebron to Egypt, omitting Gaza.

As for the actual route of the Hebrews who c.1290 B.C. left Egypt for Palestine, we have little to guide us so far as the places mentioned in the Exodus and Num-

bers have been located by archaeology. As Major Jarvis, one-time Governor of Sinai, remarked, these books are wonderful from the literary and human-interest viewpoints, but most unsatisfactory as road reports. We shall mention two itineraries.

The traditional route takes the migration from the region of Ismailia-Zagazig across the Isthmus of Suez into the Sinai Peninsula not far from present Suez; then south into the apex of the rugged projection of the Arabian Peninsula known as the Plateau of Sinai, between the Gulf of Suez and the Gulf of 'Aqabah at the head of the Red Sea; and out by way of 'Aqabah. Several years were possibly spent at Kadesh-barnea, now satisfactorily identified as 'Ain el-Qudeirat, with its famous springs, near the southern frontier of Palestine. In Kadesh today there are evidences of very early irrigation and an ancient reservoir which may be Hebrew masonry. The route from Kadesh into Edom, Moab, and the grazing lands of eastern Palestine was probably on trails still used by companies of nomadic grazing sheiks. The baffling part of the itinerary is the first stage of the flight from Egypt.

Major Jarvis, who had nine years of experience with roads and topographical peculiarities of the Sinai Peninsula, has advanced belief in a northern route, which Garstang and others of reputable authority favor. The authors of this book accept the Jarvis route. In his *Yesterday and Today in Sinai*, Jarvis advances the theory that Israel never visited the southern tip of Sinai or its Gebal Mousa (Mount Moses), or even Gebal Serbel slightly north of Mount Moses. The latter elevation, Gebal Mousa, became "sacred" as late as the fourth century A.D. Taking the Hebrews out of Egypt by way of Bardawil Lake which we pass by train en route to Egypt, Jarvis makes this forty-five-mile lake the "Sea of Reeds" which brought disaster to Pharaoh's chariot—and not the Red Sea. Lake Bardawil, he feels, is the Yam Suf of the Hebrew text. Near here was the flying course of migrating quails, which still fall thick on the sand. Near here were grazing lands capable of supporting the migrants for years. And to the south Gebal Hellal towers an abrupt 2,000 ft. from

the alluvial plain, with quite as much impressiveness for the Mount of the Law as Gebal Mousa in southern Sinai, which is one of a group of peaks. Jarvis envisions the Hebrews living in the triangle between El Arish, Rafa, and Kosseima near the Mediterranean coast, until they turned sharply southeast to Kadesh-barnea, farced south to 'Aqabah and thence by the traditional route to Edom. If for no other reason than for his location of the Oasis of Elim at Masaid, on the coast where we still see a fringe of scanty palms almost buried in the sand, our intuitions incline to Jarvis' route. Near here are aged tamarisk trees, fed upon by insects leaving manna-like deposits (see Ex. 16). What a camping place! "Twelve springs of water, and threescore and ten palm trees." Along the coast road used by Arabian caravans since the dawn of history, braziers of burning wood or lighted torches, used to guide the stragglers, afford a natural explanation for the divinely timely pillars of cloud and fire witnessing Jchovah's encouragement to Israel on the march.

In Transjordan we have traveled over parts of the Roman road which was the north-south route of ancient times between the Jordan and the eastern desert. It has run from the border of Syria to the Gulf of 'Aqabah for 4,000 years. Trajan rebuilt the highway for his prosperous Nabataean subjects in the second century A.D. And the King of Transjordan today has spent a fortune improving the same hoary highway of man. His engineers often turn up Roman milestones which give him a good long perspective on his potentially rich land. The fine job executed by Roman engineers is still serving civilians of Transjordan, as Glueck points out in his generous reports of explorations in eastern Palestine, where Bible people spent some of their important formative years developing a social and religious constitution. These old Israelites are real to us as we transverse the road-courses possibly used by the messengers of Moses when they delivered pleas to kings of Moab and of Edom. The Lawgiver begged that his wandering nomads be allowed to use essential links in their royal highroads in orderly fashion, but he was refused.

The weirdly gorgeous scenery along Transjordan ways impresses us with the geological craziness and incredible antiquity of thunder-riven gorges full of rolling stones and empty of habitations. The deep shadows of the Wadi Zerkā just at dusk, under a rising moon, with a tiny lantern beaming miles away in the nearest dwelling (illus. 129), and the noontime deliciousness of rest along the oleander-lined water-course of Wadi Nimrin, where sheep, goats, and shepherds drink, put us back in the company of Moses and Joshua as little else can.

The presence of Early Bronze Age settlements along this north-south highway in Transjordan, says Glueck, "authenticates the general validity of the background of Genesis 14. As long as human beings dwell in the Rift, the north-south track will continue essential to their life."

CARAVAN ROUTES

Numerous biblical narratives carry us into the heart of the great caravan trails of the Middle East. In a netlike web of vital activity, they intersected Bible lands and were life-bringing arteries of supply. For their control one civilization after another contended, as nations today struggle for mastery of the Burma Road, carrying essentials to the interior of China. We have seen some of the hoary little trails of the Middle East paralleling or intersecting modern macadam, as at Dothan, whence Joseph was kidnaped and carried into Egypt by a caravan of Midianite traders, and at Greek Eleusis (illus. 198).

What were the main caravan routes in Bible times? Many of them persist in routes of desert buses, as you will see if you place the map of Bible lands prepared by the National Geographic Society alongside the map appearing in Rostovtzeff's *Caravan Cities*. With the exception of the valuable caravan route formerly controlled by Petra (Sela) in the mountains of southern Moab, roads used by asses and camels 3,000 years ago are followed now by motor busses, sometimes paralleling or crossing sections of the Iraq Petroleum Company's pipe line, which runs in wishbone fashion from Mosul to Tripoli and Haifa.

THE DEPORTATION ROUTE TO BABYLON

The east-west caravan routes across the Syrian Saddle, or by way of the Fertile Crescent, interest us because they must have been used by Hebrew exiles faring from Judaea and Samaria to their Captivity in Babylonia. One course runs east from Homs (Emessa) to Palmyra (Tadmor, rebuilt by Solomon); southeast to present Baghdad; then south along the Euphrates to Babylon (present Hilla). Another caravan route, now a bus path around the Syrian Desert Saddle, goes south of the above trail, from Damascus to Rutba, joining the Homs route at the Euphrates. A third route ran—and runs—from Aleppo along the Euphrates southeast. Still other veins of road go out from near Jerash and Amman in Transjordan to join trails at Rutba for Baghdad. Of air lines over these same desert stretches, from India, Persia, Palestine, Syria, Egypt, Greece, and the west, there are too many to list here. See map of the National Geographic Society. Desert tracks by land or air indicate man's persistence to exchange his cargoes of human beings and of native riches in one way or another between the Mesopotamian valley and the Mediterranean. The first glimpses modern man has had of some stretches known to people of ancient Bible lands have been from planes. Sight of the strategic pass over Mount Carmel at Megiddo is an example.

We shall probably never know the exact itinerary of the Babylonian exiles from Judaea and Samaria any more than we shall learn the route taken by the Hebrew tribes who slowly made their way from Egypt to Palestine. One thing is certain: the exiles must have gone afoot, as refugees ever since that seventh and sixth centuries B.C. have gone, with pain and bitterness. More rosy is the picture of the return, so far as transportation is concerned. Nehemiah lists the craftsmen, servants, singers, and businessmen as bringing 736 horses (note that horses are first in the animal list), 245 mules, 435 camels, and 6,720 asses (Neh. 7:66-69). Here were enough mounts to convey in comfort

many of the thousands who came back to Palestine, even if Nehemiah's docket of figures is not accurate.

THE WAY OF THE SEA

The Great West Road or Way of the Sea (or *Way to the Sea*), to which we have referred, had various branches. As George Adam Smith pointed out long ago, one fork came down from Damascus, along Mount Hermon, crossed the Jordan between Merom and Galilee near the present Bridge of the Daughters of Jacob, and passed on to the Dothan region of Joseph's enslavement. Then, one branch, which we have followed by motor, turned west to Safed, set on its high hill, and glided down the valley between upper and lower Galilee, and on to Acco (present Acre, just north of Haifa). Another branch went south to Capernaum and the Plain of Genessaret, joining the west branch at Ramah. Still another left Capernaum for Arbela (Irbid?), wound between Mount Tabor and the hills of Nazareth to the Plain of Esdraelon, crossed to Megiddo, and followed the Mediterranean shore down the Plain of Sharon, into the Philistine Plain, and so to Egypt. Also, a fifth branch of the Way of the Sea ran from Capernaum to Tiberias on Galilee, thence to Beth-shan and the Plain of Esdraelon.

NORTH-SOUTH CARAVAN TRAILS

North from Mount Carmel, with its now busy modern port of Haifa, an ancient trade route followed the coast up to Antioch. This way, used often by Paul and his companions, is now a macadam motor highway running through Palestine, present Lebanon, Latakia, Hatay, and Asia Minor. Parts of it were carefully graded by British engineers even before the military constructions of World War II. The "Face of God" promontory is one of its conspicuous features.

Caravans took advantage of brook beds and soft plains along rivers such as the Nile, the Orontes, and some courses of the Jordan. They avoided unfriendly regions, as Job implied that caravans evaded "the companies of Sheba."

ARABIAN SPICE ROUTES

The north-south caravan routes joined Asia Minor, Syria, and Palestine with Arabia. Branches forked off to Egypt at the bottom of this bridgehead of history. The Arabian spice routes and incense trade-ways supply the background to three Old Testament narratives: the enslaving of Joseph; the gift-bearing journey of the Queen of Sheba to Solomon's new Hebrew court; and possibly the reverent ride of the Three Wise Men to the manger of Jesus.

Genesis 37 is explicit about the itinerary of Joseph's abductors: "a caravan of Ishmaelites was coming from Gilcad, with their camels [a picturesque anachronism for Joseph's century] bearing spicery [gum tragacanth] and balm [mastic] and myrrh [laudanum], going to carry it down to Egypt." These Midianite traders to whom Joseph's brothers sold the boy from their grazing ground on the Plain of Dothan between Jczreel and Shechem had come from the land on the east coast of the Gulf of 'Aqaba, opposite the Sinai Peninsula, southeast of what became Solomon's smeltery town, Ezion-geber. They were natives of the west Arabian Desert, and the wares they were transporting to Egypt were typical products of Arabia and of the lands they traversed in their long overland journey through Edom, Moab, and Gilcad, and over the Jordan to Dothan.

The gift-bearing journey of the Queen of Sheba from her realm in southwest Arabia tallies with what Albright calls the "Sabaeen extension of Arabian camel trade which in the early first millennium [Solomon's time] competed with the old Red Sea trade." Her presents of gold, spices, and precious stones indicated by I Kings 10:10 were products of her rich caravan kingdom. Hers was "a very great train" of camels that came tinkling their soft-footed way into Solomon's magnificent new capital at Jerusalem. Jars such as may have held her spice-gift have been excavated in eastern Palestine by Glueck. They carry south Arabian inscriptions.

The Wise Men from the East, listed by Matthew as seeking the newborn Christ whose star had led them far, may have come out of star-worshipping Chaldea to

which their gifts had penetrated from India or over caravan routes from Arabia. Possibly they were themselves Arabian frankincense capitalists, grown wealthy on their trade along the great incense route. At any rate, they were familiar with more than one road, for, warned to avoid returning home by way of Jerusalem where Herod's jealous rage over the infant King was at the boiling point, they majestically "departed into their own country another way" (Matt. 2:12). How we wish that the author of this Gospel had added just one more word, the name of their homeland. But this anonymous homage is one of the matchless details which keep the nativity narrative romantically enigmatic and ever intriguing.

Caravans of spice and of myrrh in Old Testament times went from the Persian Gulf across Arabia to Petra, in its mountain fastness south of the Dead Sea, thence to Gaza, and up the Mediterranean or along the east shore of the Dead Sea and Jordan River to Damascus.

In addition to the north-south trade route across Transjordan, one used in the Early Bronze Age turned west, Glueck believes, at Feinan, for Sinai.

Even central Africa, Rostovtzeff states, sent out rich wares by caravan to Egypt and Syria.

CARAVAN CITIES

The growth of caravan trade after the eleventh century B.C. naturally led to the rise of fabulously rich cities at their termini. These were adorned from trade wealth as no emperor could have ornamented them architecturally. *Palmyra*, one of the younger cities, mentioned in II Chron. 8:4 as Tadmor "in the wilderness," was built by Solomon at the hump of the Syrian Saddle. Through it the wealth of the Tigris-Euphrates Valley flowed into Syria and Palestine. In centuries when its rival, Petra in Edom, was weak, Palmyra was the one link between Yemen, central Arabia, southwest Palestine, and Syria. In fact, several major caravan routes intersected at Palmyra, one coming from Aleppo diagonally across to the Euphrates. The wisdom of Solomon put to use this natural trade point and made it a center

for disseminating the famous Cilician-bred horses coveted even by Persian connoisseurs and Egyptian charioteers. Rostovtzeff, whose *Caravan Cities* embodies substantial research, calls Palmyra "the most typical caravan city of antiquity," with roads from all directions converging in one remarkable avenue having 350 columns, some 150 of which remain today, and arches indicating points of departure to distant halts. The Great Temple, dedicated to the Babylonian god Bel, dates from the closing years of the era just before Christ.

Albright calls our attention, in the *Haverford Symposium*, to the fact, that Palmyra has yielded no excavated material thus far which can be dated earlier than the ninth century B.C. We have seen in the new Damascus Museum busts of some of the trader-personalities who made Palmyra famous in Roman times, men known as "Synodiarchs," caravan leaders who achieved political power.

Far older than Palmyra was *Petra*, the rock-cut, rose-red city in the mountains of Edom behind sacred Mount Seir, mentioned in the Song of Deborah as Jehovah's awesome dwelling place from which He marched "out of the field of Edom" (Judg. 5:4). This has been rated "the most wonderful of all caravan cities." With caves, temples, and tombs alike carved out of solid rock at the end of a narrow gorge, Petra was itself as snug as a robber-baron stronghold, off the actual caravan route, yet clutching its control. Its greatest prosperity was in the Nabataean period, just before and just after the beginning of the Christian era. Job may have known Petra. We cannot share the suggestion that Petra could have been the Kadesh-barnea of the migrating Hebrews coming up from Egypt. But we believe their course may have brought them past its aloof site.

Jerash, one of the Greek cities which spread out fanlike from Beth-shan, was not built as a caravan city but was, nevertheless, one of the most prosperous trade centers in the centuries just before Christ and during the early Christian period. At that time, her pagan temples were melting into mosaic-trimmed Christian churches, whose rich remains have thrilled us, when

sunset glow threw into shadow her famous straight Street of a Thousand Columns. In the oval forum of Jerash caravan wealth was received and distributed. And here the famous horses were exercised. See Index for further material on elegant Jerash.

Other caravan cities included Damascus, whose caravansaries are today still picturesque, even if horribly odorous; Amman in Transjordan (illus. 92 of caravansary at Amman); Tyre and Sidon on the Phoenician coast; Baghdad; and Dura-Europos, which has yielded deep secrets of wealth and beauty to the spades of American archaeologists.

The Tell-el-Amarna Letters, written c.1400 B.C. by petty Egyptian vassals, are replete with the comings and goings of caravans and with lists of articles sent by kings of Egypt to rulers at Babylon.

Old Testament writers were well aware of habits of caravans. Isaiah referred to troops of camels and asses (21:7) and to caravans of Dedanites from northwest Arabia, lodging in forests (21:13). Job, who may have been a man of Edom, land of pack trains, spoke of the waylaying of caravans passing through hostile country. He suggests that "companies of Sheba," in Arabia, "waited for them" (6:19). The author of I Kings 10:28 refers to droves or caravans of horses brought for Solomon from Egypt.

The busy trading street in Syrian Homs gives the atmosphere of this ancient caravan center, whose road northeast to Hamath and Aleppo is one of the oldest highways in the world. Camel caravans laden with sacks of wheat, such as we see today in August coming from Hauran (illus. 12), file past as they have for thousands of years; caravans of camels are led by donkeys. These majestic, slow-plodding navies of the desert fascinate as do few other details of scenery in Bible lands. The pity is that motor traffic is fast pushing them out of existence, save in their true habitat—Arabia and portions of eastern Syria. Homs was known during the Crusades as Emessa.

HITTITE ROADS

A notable example of the road strategy of an ancient military people of Bible lands

is discussed by John Garstang in the *American Journal of Archaeology*, January-March, 1943. He indicates the construction by the thriving Hittite Empire of the fourteenth century B.C. of a "great road to the west." This way traced an early trade route with an exit probably at Smyrna, a branch to Ephesus on the Aegean, and a main arm running down the Meander Valley, as Hittite monuments along the way indicate. (See illus. 43, a Hittite sculpture.) A natural terminus of the Hittite military road was Miletus, keeping an eye on the thick sprinkling of strategic Aegean islands which in 1943 were of paramount international significance again. Paul, with his preference for low roads, may have used some of the Hittite routes along rivers of Pisidia flowing toward the Mediterranean. Turks, who claim descent from Hittites, are doing much in modern times to improve roads all over the realm once controlled by these ancient people. Cuneiform religious texts of the same Hittites and sculptured evidences of a great national culture c.1100-700 B.C. have stirred archaeologists to delve into what Albright calls a "highly syncretistic civilization." Caravans from Babylonia and Assyria brought cultural influences to barbarian Hittites who by the twelfth century B.C. had become one of the greatest powers of western Asia.

Another well-known example of military highways used throughout Bible times is the Highway of the Conquerors at Dog River, Syria, known as the Nahr el-Kelb, emptying into the Mediterranean. The road runs through a steep gorge, at whose feet sheep drink peacefully on a sand bar where the river enters the sea. This timeless road has carried aggressive armies of Phoenicia, Egypt, Persia, Babylonia, Greece, Rome, and nations of modern Europe, who have left, cut in the rock, terse records of their triumphs. See in illustration 200, beyond the figure of one of the authors of this book, a dim but surviving Assyrian conqueror, with right hand uplifted.

SACRED WAYS

Several cities of Bible lands had roads famous because they led to major worship

centers. One of these was the Sacred Road to Eleusis, twelve miles west from Athens. When seasons came for celebration of the Greek mysteries at Eleusis, which were as thoroughly Greek as the Olympic games, the procession wound out through the Dipylon Gate of the capital, along the way lined with tombs of famous citizens, and topped the pass over Mount Aegaleos. The celebrants halted at a Temple of Apollo, succeeded in Byzantine times by the charming little monastery Church of Daphni with its story-telling biblical mosaics. Resting at the salt springs, whose dammed-up waters near the ancient road can be seen in illustration 198, the procession came into the squalid village of Eleusis, birthplace of the great dramatist, Aeschylus, and noted today for its military airport. When they reached the Hall of the Mysteries, or Telesterium, they participated in rites honoring Persephone, daughter of Zeus and Demeter, who had been carried off to the underworld by Pluto. Paul, if he walked to Corinth from Athens, instead of taking a boat across the Saronic Gulf must have passed Eleusis. He doubtless pondered the never-revealed details of the mysteries and thus came to describe the resurrection in terms of sown grain which is quickened in the spring (I Cor. 15).

In Athens, the route of Pan-Athenaic processions terminated at the Acropolis. The famous *Dromos*, or Broad Way, leading to this high place of temples was discovered in the region of the *Kerameikos* by the American School of Classical Studies shortly before World War II. A report on the *Dromos* appeared in *Hesperia*, July-September, 1939. This stretch of sacred way had been paved with large blocks in the Roman period and extended from the Dipylon Gate (illus. 64), past the Altar of the Twelve Gods in the Agora. The altar served as a milestone for measuring distances from this heart of the Hellenic world. Near the *Dromos*, excavators found a boundary-stone indicating the Sacred Way to the Temple of Apollo at *Delphi*, used by processions from the fourth century B.C. on.

Rome had her *Via Sacra* running through the Forum Romanum from the Arch of Titus, through the maze of temples to Castor and Pollux, Vesta Faustina, and

Julius Caesar; on past the great Rostrum; beside the Basilica Julia and the Temple of Saturn; then up to the Capitoline Hill, passing on its way the circular construction known as the "Umbilicus Urbis Romae," official center of the capital. No sacred way in Bible lands ran among so many influential shrines. See, in illus. 81, men removing weeds from one section. The Apostle Paul was familiar with the Roman *Via Sacra*. It was only a few feet from his cell in the Mamertine Prison.

Cumae, possibly the oldest Greek colony in Italy, had its Sacred Way to an acropolis above the Tyrrhenian Sea twelve miles west of Naples. This portion of the Domitian Way we have walked upon and photographed, because of the quality of its polygonal paving and because of its picturesque approach to the tunnel of the oracular Cumaean Sibyl, the Temple of Apollo, vestiges of early Christian churches, and their baptistries. A portion of the uniquely vaulted tunnel at the end of the Cumaean Sacred Way appears in illus. 245. When Paul was at *Putcoli* where he landed for Rome, he was just below the Sacred Way of Cumae, the town which was given credit for founding *Putoli*.

Babylon, too, had its Sacred Way, where Hebrew captives saw processions bearing images of Marduk, as Greeks carried a likeness of Athena to their Parthenon. This holy thoroughfare, called *Procession Street*, passed temples, palaces, and hanging gardens, on its way out through *Ishtar Gate*. For *Ishtar Gate* and a brick from adjacent paving, see illustrations 113 and 115.

Sacred avenues usually led to the great temples of Egypt. Alabaster sphinxes lined the approach to the Temple of Ptah at *Memphis*. A mile-long causeway connected the great temple at Luxor with the vast Temple of Amun at Karnak. A ram-flanked road led from the Temple of the Goddess Mut to the gate of the mighty Temple of Amun. A famous sacred street led from the complex of shrines at Karnak to a quai on the Nile. In Akhenaton's new City of the Horizon of Aton at *Amarna*, a sacred way connected the palace of the king with residences of courtiers and with the Temple of Aton, whose

pylons, pillars, open courts, and altars were conducive to rich offerings. At Heliopolis, a sumptuous approach and obelisk-trimmed court struck worshipers into awe, even as the steep steps of the Propylaea up to the Acropolis and the Parthenon awed pious followers of the intellectual Athena.

But the holiest sacred way in Bible lands is Jerusalem's *Via Dolorosa*, whose first-century level is now buried under 30 ft. of debris. Perhaps it is better thus concealed. Who could tread the stones which carried the cross-bearing Christ from Pilate's judgment hall and the *Ecce Homo* Arch, where he was displayed as "the Man," up to Calvary, which we believe to have been under the present Church of the Holy Sepulchre? Each Friday afternoon a strange procession of scholars, clergy, soldiers, and civilians retraces the nine stations of the cross which enable certain types of Christian to re-experience the agony of Jesus (illus. 169).

"STREETS OF THE SEPULCHRES"

Related to sacred ways were streets of the sepulchres which we find in typical cities of Paul's era. They were just outside the gates. There is one which Paul must have seen in Athens, near the Dipylon Gate in the Potters' Section, with its remaining gems of Greek funerary art (illus. 64). Similarly, he must have noticed on the last stretches of the Appian Way (illus. 202), as he came into Rome, the countless and ever-varied mausoleums, tombs, and graves of eminent Roman citizens laid to rest just outside the gate of the city they loved.

In Ostia, port of Rome, which had been vastly improved just before Paul came to Italy (see p. 126f.), the perfect scheme of symmetrical city-planning provided for a *Via dei Sepolcri* parallel to the Ostia Road leading from Rome. Burials were made in this region for 800 years, beginning with the third century B.C. Some of the tombs give clues about the buried: a young mother who died giving birth to her child; a Roman knight and his wife; a patron-Consul; and a member of the Praetorian Guard who had perished extinguishing a fire. Many of the tombs on this

elegant Street of the Sepulchres have statues of carved marble, elegant screening, and chambers trimmed with polychrome mosaics. Numerous columbaria, or group-niches for funeral urns, were built by funeral clubs. They look strangely like filing cabinets.

The Street of the Sepulchres in Pompeii, near the Street of Consolation, was one of the most noted in the first-century Mediterranean world. The eminent Italian scholar, Amedeo Maiuri, who suffered both physical and mental anguish in 1943 at the occupation of the city he had helped to excavate with meticulous skill, says of this noted street from the era of Paul: "400 metres of the road had been laid bare, flanked by villas and monumental tombs for private and public use." Located just outside the Herculaneum Gate, this street shows mausolea surrounded by statues, cecedra with stone seats, plain niches, garden-tombs and almost every variety of sepulchre known in that century.

In Jerusalem, outside the Golden Gate and Stephen's Gate, along both walls of the Kidron Valley through which runs Jericho Road, there are myriads of graves. Jewish ones are on the east, and Moslem ones on the west of this valley-street of sepulchres (illus. 214).

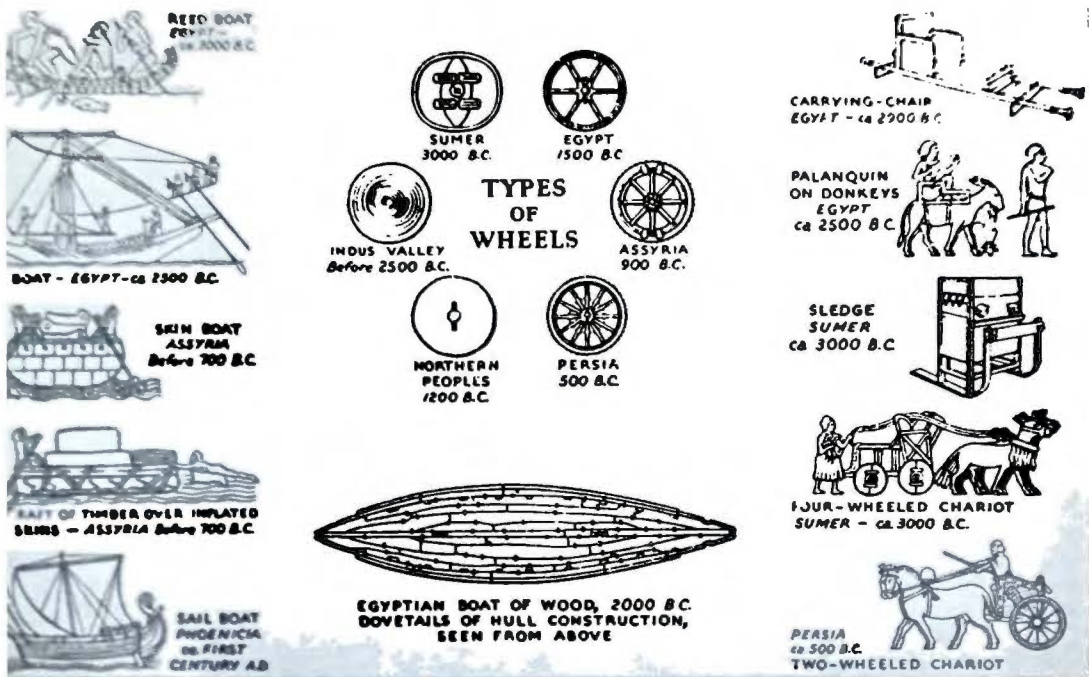
ON ROMAN ROADS WITH JESUS AND PAUL

Both Jesus and Paul enjoyed the convenience of good roads which linked Roman Empire centers from Rome to London and Jerusalem, and the cities of Asia Minor, Syria, and Transjordan.

In the first century, people in great numbers were coming and going over the best highways which civilians and traders had ever known. Built primarily to maintain the *Pax Romana* and to guarantee prompt delivery of Roman post dispatches, they proved a boon to taxpayers.

TRAITS OF ROMAN ROADS

Roman roads had several marked characteristics. They almost always took the straightest line between two important objectives, whether the goals were important



194. The Evolution of Transportation, from Ancient Times. (Ginn and Company)

105. The two-wheeled Egyptian cart is the modern survival of one of the oldest vehicles of Bible lands (Gen. 45:19).



196. Camel caravan tinkling its way through narrow streets of old Jerusalem toward David's Tower and Jaffa Gate.



197. Scene along the road from Galilee to Damascus, the traditional site of Paul's conversion (Acts 9:1-9).





195. The Sacred Way from Athens to Eleusis runs along the Bay of Salamis, right of the picture, and skirts the Rheitoi Lakes sacred to Persephone and Demeter. Bathing ceremonies in the water of these lakes were part of the ritual of the Eleusinian mysteries.

199. Eastern Gate leading into the Street Called Straight, Damascus (Acts 9:11). The Christian Quarter today is in this vicinity.



200. Highway of the Conquerors, at Dog River (Nahr-el-Kelb), a little north of Beirut. On the rock surface of the gorge, conquerors from Egyptian pharaohs to marshals of France and British soldiers of World War I have cut their cartouches. At upper right is the record commemorating the capture of Damascus, Homs, and Aleppo, October, 1918, by Desert Mounted Corps of British Army. Below, to left of the figure, a dim relief of an Assyrian king with right hand raised.



201. A Roman milestone from old Appian Way decorates balustrade of Capitoline Hill.



202. Appian Way near Rome. Paul traveled this road (Acts 28:15). The thoroughfare for miles is lined with tombs of distinguished citizens.

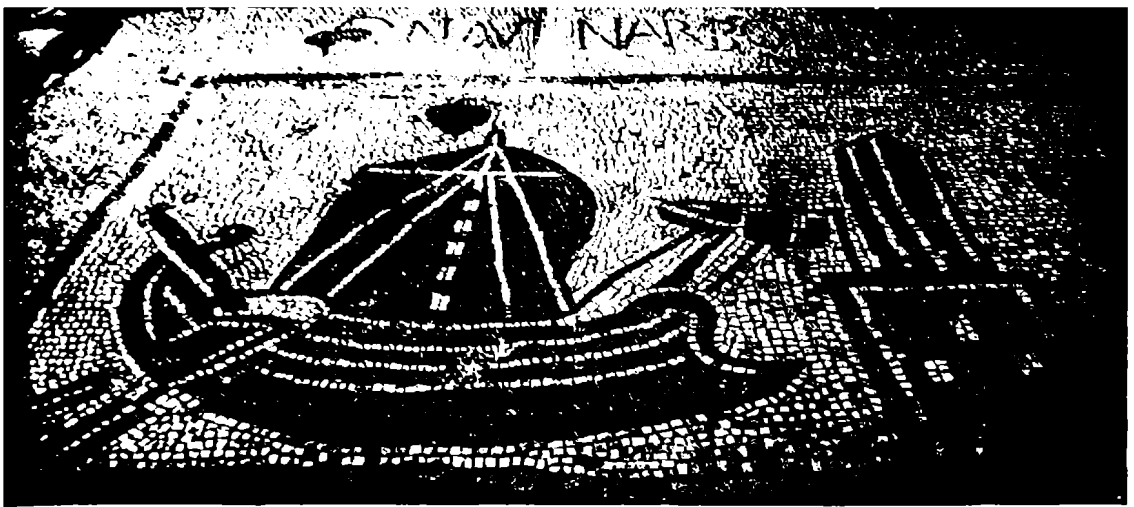
203. Decumanus Maximus, Ostia, from Theatre. The paving shows the nature of a first-century Roman street.



204. Chariot ruts in polygonal paving blocks of the Street of Consolation, Pompeii. The much-traveled Street of Consolation, left of center, leads to the aristocratic burial grounds of the city. A wine shop is plainly visible at the fork of the road. Steppingstones in the immediate foreground provided pedestrians with dry footing in rainy weather. Smoking cone of Vesuvius in background.

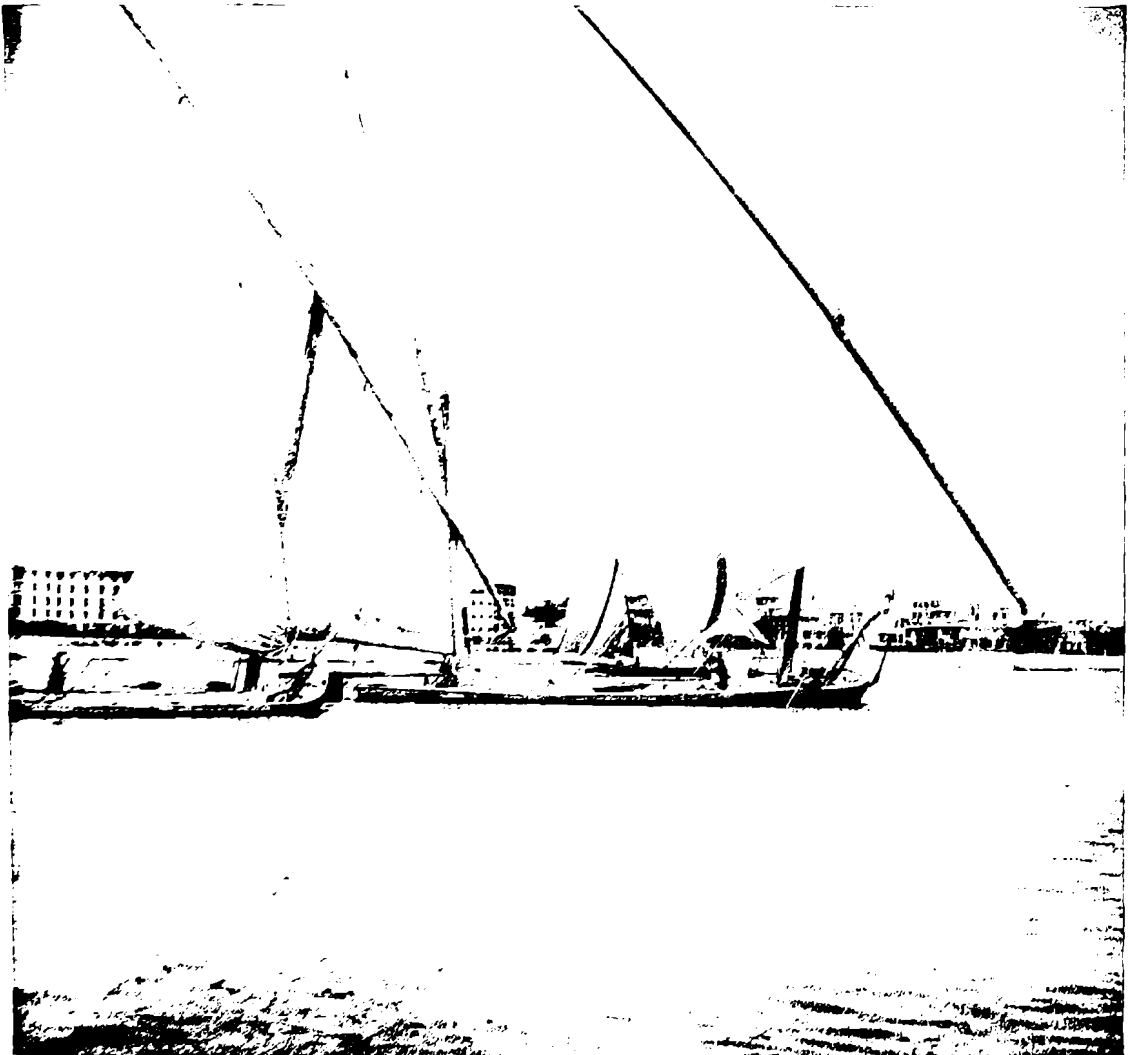


205. Lechacum Road, Corinth, the great street leading from the port of Lechacum to the Corinthian Gulf to the market place in Roman Corinth, part of which appears in the picture. More than 300 yd. have been excavated. Paving of cream-colored limestone slabs from Acrocorinthian quarries. Raised sidewalks on either side, interrupted by monumental bases. Foundations of colonnades. Smooth gutters. Absence of chariot ruts indicates pedestrian use, because of the steepness at ascents. Shops with open fronts line Lechacum Road and made the platform of the basilica, in whose tribunal, possibly, Paul was tried before Gallio (Acts 18:1-17).



27. Mosaic pavement showing merchant marine, in the Square of the Corporations, Ostia.

28. Red Nile barges with upturned prows popular in antiquity carry loads of stone



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landmarks or just regions to be patrolled. Roman highways were always well drained. They were curbed, often with travertine. They had wells at convenient intervals. They were kept in good repair, under supervision of reliable "curators of roads," who were willing to spend the equivalent of \$4500 per Roman mile—430 ft. shorter than ours—for durable construction. A cross section would show a foundation of rubble, then flat stones laid in lime, and then a layer of rubble. The top paving was of polygonal blocks of silex or basaltic lava neatly fitted into concrete, intersticed with basaltic stone. In some instances, roads were paved with blocks of stone instead of polygonal units. Illustrations of such well-built Roman roads and streets appear in illus. 203 and 205. When we walk on them, we feel ourselves in the company of those who thronged them twenty centuries ago and who possibly saw Jesus and Paul or, at least, heard of their work. The modern macadam motor roads laid by Great Britain, France, and Transjordan will not be as durable as Roman roads which still come to light under the spade of archaeologists.

One of the finest examples of the engineering directness of a Roman street we can cite is the Decumanus Maximus at Ostia. Here Italian archaeology reached its high peak just on the eve of World War II (illus. 203). We walked along this well-paved, main thoroughfare of the busy harbor and storehouse of Rome in Imperial and Republican times. Ostia, the first Roman colony, was founded (c.335 B.C.) at about the time the first Roman money was minted (with a ship's prow on its face). In Paul's time it was a naval station for the capital. It was important for more than a century before the Christian era, growing from a little military port to an elegant business center, while Rome herself gained prestige up the Tiber a few miles. Although it is true that Puteoli, used by Paul for his landing place, was port for Rome in Republican times, Ostia was already becoming the emporium of Imperial Rome. Nero completed the harbor with pomp in A.D. 54. We recall that Paul arrived in Italy about A.D. 59. Ostia was then "something new." It is most appropriate that the new basilica,

under construction as part of the nobly conceived but miscarried World's Fair of 1941 for Ostia, was to be named in honor of Paul and Peter, whose execution occurred not far away.

Another example of the straight Roman "Main Street" such as Paul used is the Strada di Nola of Pompeii, running directly across the center of this town, which was flourishing in Paul's time. Also, the Pompeiian Strada Dell'Abbondanza and the intersecting Strada Stabiana illustrate this straight-way system.

In Graeco-Roman Jerash, the long Decumanus Maximus intersects the Cardo, or Street of a Thousand Columns. In Asiatic Greek cities of Paul, pre-Roman history of ancient settlements often made the Roman ideal impossible of execution. Old streets still twisted as they had in early centuries.

Roman streets were made comfortable for pedestrians by narrow, elevated footpaths, which, together with steppingstones at street corners, lifted people's feet above the heavy winter rain pools. See, in illustration 204, a Pompeiian street. Note the spring flowers blooming among puddles and steppingstones. The chariot ruts are worn deep here where traffic rounded this busy corner, halting at the tavern whose ruins appear in the picture, where the Street of Consolation leads into the Street of the Tombs.

MILESTONES

Christ and Paul knew along Roman highways the round stone milestones, 4 ft. high, carved with distances and the name, titles, and year of the emperor who erected them. They were about one Roman mile apart (c.4,850 ft.). The surviving Ninth Milestone out from Jerusalem is an ancient marker which may have been on the road Jesus walked to the village of Emmaus, "threescore furlongs from Jerusalem" (Luke 24:13), on the first Easter afternoon. A furlong is one-eighth of a mile. This milestone was found near the Benedictine Monastery at Abu Gosh (one of the Emmaus sites), in whose portico it is preserved. The Second Milestone out from Jerusalem was found by John Whiting at Nob vil-

lage and is today in a Michigan Museum.

The first Roman milestone from which roads out from the Empire capital were measured was called the "Golden Milestone," or *Miliarium Aureum*, whose site we have noted in the Forum Romanum. Illustration 201 shows a cylindrical milestone of Rome, found in a suburb along the Appian Way. It was brought to a majestic setting on the Capitoline Hill near the equestrian statue of Marcus Aurelius, the Senate House, and the Museum, at the head of a broad flight of stairs set in a garden of palms, shaven grass, oleanders, and wisteria; this, at least, was its setting as we saw it in August, 1939, on the eve of World War II. It had been recarved in 1584 with this inscription:

S.P.Q.R.

Columnam Miliarium Primi ab Urbe Lapidis indicem ab Im. Vespasiano et Nerva Restitutam de Ruinis Suburbanis Viae Appiae in Capitolium Transtulit. Anno MDLXXXIV.

The Senate and the Roman people have transferred to the Capitol [this] milestone measuring distance from Rome, [this low] column of ancient stone, recovered from ruins near the Appian Way by the emperors Vespasian and Nerva.

1584

ROADS THAT JESUS USED

During his youth at Nazareth, Jesus lived at the crossroads of busy caravan routes and Roman military ways whose traffic put him in touch with many more people than he could possibly have seen in native environments. We can imagine him, standing, as little boys still stand on Nazareth's main street, pondering the contents of bulging camel sacks on pack-trains swinging down the highway.

One road came into Nazareth from the Mediterranean north of present Haifa, skirted the north edge of the great Plain of Esdraelon, passed through Harosheth of the Gentiles and Sepphoris, and came south from Jahpia into Nazareth. Another ran along the south part of Esdraelon, below Megiddo, melting into the road from Jerusalem across the plain, and entered Nazareth by a steep south-north climb past the Hill of Precipitation.

Leaving Nazareth in a northeasterly direction, a road dropped down to the Sea of Galilee, by way of Cana where Jesus had many friends. This is a most sacred little highway because it passes the Horns of Hattin, a saddle-shaped hillock where Jesus may often have taught his eager disciples (illus. 131). It runs between well-tended gardens today, from which opens one of the most impressive vistas down to the Lake.

Once he had reached the blue-green, misty sea, Jesus took little winding, tree-shaded footpaths, as he walked from one seaside village to the next—Magdala, Tabgha (Bethsaida), Capernaum, and the others. Boats, sailed or rowed across the lake, put Jesus at once in touch with roads of eastern Palestine.

From Sepphoris, northwest of Nazareth, he could get the road to the Phoenician coast towns near Tyre, Sidon, and Zarephath which, however, he seldom visited. We can picture him turning more frequently east along the Valley of Jezreel below Beth-shan to cross the Jordan for the Decapolis cities. Leaving that region, he could have come down the impressive Wadi Nimrin to the vicinity of Jericho, taking the weirdly beautiful but difficult climb up through the Wadi Kelt, whose barren waste surfaces resemble photographs of the moon more than portions of our earth (illus. 135). The road from Jericho enters Jerusalem through the lower Garden of Gethsemane and winds into the city at the northeast corner of the wall, where it swings past the new Palestine Archaeological Museum (illus. 30). Other glimpses of the road to Jericho appear in illus. 168 and 161.

During his ministry near Jerusalem, Jesus was again at the intersection of roads bringing loaded caravans from distant cities (illus. 196). This stately caravan is winding down a shadowy, stepped street toward the Citadel and Tower of David. Merchants from such trains may even have been among the throngs of worshippers "from every nation under heaven" (Acts 2:5), who came not only at Pentecost but long before that for religious festivals. They followed trade routes from Mesopotamia, Cappadocia, Phrygia, Egypt, Libya, and upper Galilee.

Often, as we have gone to lovely little Bethlehem over the olive-dotted highway five miles south from Jerusalem, we have wondered whether in manhood, Jesus ever visited the City of the Star, where his birth was attended by such beautiful manifestations of God's love. This is one of the many silent chapters in his life. Illustration 227 gives a glimpse of this road, at Wise Men's Well.

We imagine that Jesus avoided the Roman highways whenever possible, even as he avoided Samaria sometimes and used the heavily shaded but hot walk down along the Jordan to Jerusalem. Like T. E. Lawrence, he doubtless enjoyed the informal, ancient little trails through grain fields gay with spring flowers. There he halted to talk with the ever-sociable workers before resuming necessary climbs over what Lawrence in his *Letters* calls "typically twisting old roads," going pell-mell up and down hillocks without seeming to arrive anywhere, but leaving the walker exhausted and determined to keep to footpaths through purple thistle-patches on the plains.

Jesus, by his much walking, worked out a road wisdom which we seem never to emulate when going through his countryside. We are laden with the cameras, tripods, typewriter, and gadgets necessary to the writing of such a book as this. We should have been more comfortable if we had not taken the two coats, staff, and wallet he advised omitting. The "gold, silver, and brass," however, we found convenient (Matt. 10:10) in "whatsoever city or village" we entered.

ON ROMAN WAYS WITH PAUL

The four famous land journeys of Paul can be traced pleasantly by taking the Acts, together with the recent map of the National Geographic Society, and such an authoritative book as Ramsay's *Cities of St. Paul* or David Smith's careful *Life and Letters of St. Paul*. Although he was sometimes "treated" to an ass or a horse or a "two-horsed carriage," as suggested by one translation of Acts 21:15, most of the Apostle's land travel was on foot, in spite of health handicaps. The stretch of road he used most often was between

the two Antiochs—Pisidian and Syrian—passing through his birthplace at Tarsus, and through Lystra, Derbe, and Iconium. He was well served on his western travels by the famous Egnatian Road of the Roman Empire, running from Dyrrachium on the Adriatic, opposite the heel of Italy, across Illyrium (in present Yugoslavia), Macedonia, and Thrace, leading him into Thessalonica, Beroea, Apollonia, Amphipolis, Neapolis, and Philippi at the head of the Aegean. His route, time and again among the cities of Asia Minor to whom he addressed letters, was a few miles off the great east-west Persian Imperial Highway, which in most ancient times led from Ephesus on the Aegean to cities on the Euphrates. He has left no record of ever being in Colossae, although he may be the author of the epistle to the Colossians.

Among the highways used by Paul, we prefer the scalloped coast running close along the Mediterranean from the Bay of Acre over the precipitous "Ladder of Tyre" near the northern border of Palestine. Along the way up the narrow strip of Phoenicia (now the Republic of Lebanon) we come to a sight which must always have stirred Paul, as it does us: the Face-of-God Promontory looks out across the intense blue of the sea and ponders its eternal problems, while an energetic cement plant digs into its very countenance. The majestic headland between Byblos and Tripoli looms best in morning light, seen from the north, while people are still asleep above their eggplant farms and while Turkish and Lebanese sailboats are veering for Tripoli. The scene has not changed much since Paul's time, when he trudged up to Seleucia, harbor for Antioch. The water here is so clear that we have seen it reflect a single great Syrian star.

But the old Appian Way, running from Rome to the Campania and southern Italy as far as Taranto and Brindisi in the heel of the Italian boot, is the most satisfying road we share today with Paul. This narrow but once thronged highway was begun by the censor Appius Claudius Caecus in 312 B.C. This most famous road of the Empire was paved first with gravel, later with silex and volcanic matter, rather than with the polygonal or rec-

tangular blocks seen in many of the Roman roads which netted the Middle East, Europe, and Britain. The Appian Way enters the capital from the Porta San Sebastiano at the southeast corner of Rome and runs across the plain between the Sabine Apennines and the Tyrrhenian Sea, in an almost straight line. Paul reached it by the secondary road connecting Capua with Putcoli. This "Queen of Roads" is best enjoyed after a Sunday stroll in the court of the famous Church of St. Paul's-without-the-Walls, on the site of a small basilica erected by Constantine in the fourth century A.D. over the supposed grave of St. Paul. When we have halted at the Catacombs of St. Calixtus or of San Sebastiano to see the underground burial places and chapels of early Christians, we are in the mood for a meditative stroll along the Appian Way (illus. 202), following a little footpath among weeds which blow over tumbled statues of celebrities buried in the first centuries of our era. We seem to hear the clanking chains of the Apostle, as he trudged along, nearing journey's end in the capital he had yearned to see. He is jostled by passing soldiers, by Roman dignitaries in their chariots, and by slaves who will later, perhaps, be in his congregations when he preaches in his "own hired dwelling."

SOME FIRST-CENTURY STREETS

There are certain other New Testament streets which we always associate with St. Paul. Foremost is the *Street Called Straight*, in Damascus, whose very name casts slurs upon its being straight at all. It actually is a straightaway artery of trade, east and west across the once-walled capital, south of the Omaiyyid Mosque and north of St. Paul's Chapel. It roughly parallels the Barada River and is known to Arabs as *Darb-el-Mustakim*. Beginning at the Eastern Gate whose narrow portal is one of three formerly used, it carries a constant throng of heavily laden camels, on their way to musty bazaars, and jostling pedestrians (illus. 199). Motor cars halt at the square tower near the silk-weaving studios. Once upon a time the street was elegant with rows of columns such as line the *Street of a Thousand Columns*

in Jerash. But this elegance meant little to the blind convert to the Radiant Way. More interesting to Paul was Ananias, who, in the house of Judas on the *Street Called Straight*, laid hands on his sightless eyes, and "there fell from his eyes as it were scales, and he received his sight; and . . . was baptized" (Acts 9:18). A small mosque is today over the traditional site of this home.

Another interesting street in Damascus is the road winding along the southeast wall near St. George's Tomb, reputed to be that of an Abyssinian who assisted in the Apostle's escape from hostile Jews. That escape is made vivid along this tree-lined, quiet street below a house built on the city walls. From such a house Paul "was let down in a basket" by his friends (Acts 9:25) (illus. 106). But Paul, who "ran away," lived to preach another day. And we find his footprints remembered in the *Greek Boulevard of St. Paul* at Athens. Also, on one narrow, ancient street in the *Kerameikos* section, where potters made their famous Greek vases and oil jars, Paul is sure to have walked as he arrived from the harbor at Piraeus. This *Street of the Tombs* is referred to above (illus. 64).

Another Greek street which beyond doubt often felt the hurried step of the busy preacher and weaver of tent cloth is *Lechaeum Road in Corinth*, a city where he lived for as much as eighteen months at a time (A.D. c.51). This broad, impressive road is paved with large blocks of the original stones. It is wider than the usual first-century streets we find in the Italian harbor town of Ostia, for example, or in the towns Paul knew in Asia Minor. But one would expect this elegance in the twin-harbored commercial center with its jammed warehouses and bartering merchants. *Lechaeum Road* (illus. 205), now shaded by health-giving eucalyptus trees fighting malarial mosquitoes, was in Paul's day lined with little shops, a Jewish synagogue, and offices of wholesalers. It leads by impressive steps to the basilica where Paul was arraigned, and to the various springs, temples, altars, and vast colonnaded shops, or *stoae*. Foundations of these are visible as we walk in the shadow of the archaic Temple of Apollo,

older than the Parthenon at Athens, and known, surely, to Paul. Dominated by the glowering heights of the fortified Acrocorinthus Rock, Lechacum Road is one of the most impressive streets of the Pauline world. It was excavated by American and Greek archaeologists in the golden age of scientific research before the 1939 debacle of world peace.

Italy today presents several roads identified with Paul's activities. The Apostle landed from the East, at Puteoli, near Naples, resting a week with "brethren." Roads along the harbor bring him vividly to us in this busy town whose ancient amphitheatre (illus. 219) staged gladiatorial bouts, "naval shows," and contests for the victor's crown, referred to by Paul (I Cor. 9:24).

In Rome, we are near streets familiar to Paul when we walk around the vast Pantheon, one of the best preserved structures surviving from antiquity, erected probably by Agrippa (27 A.D.) as a temple, in celebration of the Roman victory of Octavian, his father-in-law, over Anthony and Cleopatra in 31 B.C. The huge building, therefore, was rather new in Paul's time. For the Apostle arrived in Rome about A.D. 60. The Pantheon seen in Rome today is the work of Hadrian, who rebuilt the fabric (110-125 A.D.).

On his last journey, Paul walked out to martyrdom past the still-standing Pyramid of Cestius, which adjoins the Gate of St. Paul at the head of the Ostian Way near the Protestant Cemetery. The much-traveled modern trolleys of Rome carry past the first-century Pyramid of Cestius crowds of Christians who are too much weighed down by the problems of current survival to think of the Apostle of twenty centuries ago who trudged this way, ready to share with Peter the supreme sacrifice of devotion to his Lord of the Living Way.

The road to Damascus, along which Saul of Tarsus was blinded (Acts 9:1-9) with the experience of Christ in an arid stretch of treeless waste, is suggested by illustration 197.

PERSIAN ROADS

One of the oldest highways in the world runs out of the interior of Persia

(Iran), linking Ecbatana (Hamadan), Isfahan, Persepolis, and Shiraz to Bushires on the Persian Gulf; thence contact was made with Basra, Ur, and Babylon. Long before written records began, patient pack trains were carrying woven goods, foods, and mountain wares out of this remote land below the Caspian Sea. Darius constructed a Royal Road from Susa to Sardis, 1,500 miles long, extending from north of Basra to the vicinity of Smyrna. Paul used part of this route on journeys through Asia Minor.

EGYPTIAN ROADS

Since the Nile provided 4,000 miles of safe and cheap transportation within its borders, Egypt spent little on road construction, compared with her neighbors. Her network of roads consisted mainly of much-used, time-hardened footpaths along the Nile, and vital canals winding through rich grain fields, as seen in illustration 13. The Delta was a network of tracks where food trains plied in every direction.

GREEK TRADE ROUTES

Except for roads built while Rome dominated Greece, the highways of the rugged Greek peninsula never amounted to much. No wonder the thriving commerce of the versatile inhabitants turned to sea paths at an early date.

Yet some overland trade routes worked their way from Athens northeast into Macedonia and Thrace. The Euxine or Black Sea region supplied slaves, hides, bronze, and certain foods, including fish. From the Crimea, Greece sent agents overland for Baltic amber. Greek coins have been found in Prussia. Yet Greeks were loath to exchange their handsome silver money (illus. 90) for barbarian goods if they could barter. Greek caravans met their ships and continued in use until the time of Alexander the Great in the fourth century B.C. Many Greek sea lanes had Tyre and Sidon as their objectives, from which old roads radiated east, north, and south.

The most unique trade asset of Greece was Corinth, on an isthmus commanding the west from her harbor of Lechacum on

the Gulf of Corinth, and the east from Cenchreae on the Saronic Gulf. By hauling small boats across the isthmus, Corinth was able to ship in many directions and to keep in touch with colonies along the Euxine, and in Sicily and Italy.

SEA LANES AND RIVER ROUTES

See, also, Section 12, Islands.

EGYPTIAN AND PHOENICIAN SHIPS

In prehistoric times Egyptians were using ships. Perhaps by 3000 B.C. they had lashed bundles of reeds together (illus. 194) and floated cargoes on the Nile or carried men and "gods" to shrines. Vases from Amratan times show sea-going galleys, as Petrie pointed out in *The Wisdom of the Egyptians*. Ships 100 ft. long, with cabins 8 ft. square and rows of 60 oars, were trading with the Aegean isles for gold and obsidian. Petrie's idea of pre-dynastic ships makes them resemble Venetian gondolas, with sharply upturned prows and abrupt sterns. Very early trading ships, according to Breasted, were used in wadies along the Red Sea. He says they looked "like two cigars lashed together" (illus. 194). Ethiopia was using papyrus boats long before Moses the infant was placed in one of these little crafts of pitch and slime-caulked bulrushes (Ex. 2:3). Isaiah refers to papyrus boats: "Ethiopia sendeth ambassadors by the sea, even in vessels of papyrus upon the waters" (Isa. 18:1). These papyrus ships were swift and light.

Breasted, in *The Dawn of Conscience*, referred to "celestial barques" 770 cubits long, which took departed pharaohs, by way of canals to "the mysterious isle" in the Field of Offerings, as deceased are carried in Venetian gondolas today. Such celestial barques remind us of the Greek ferry of Charon to the underworld. Egyptian ships, which in the fourth century B.C. crossed the Mediterranean carrying tremendous obelisks, elicited admiration even from Alexander the Great. There were many centuries when the Egyptian navy was stronger than that of the Roman Empire.

Art has conserved for us "motion pic-

tures" of stone-carved sequences, representing naval engagements of the royal Egyptian fleet; a lioness' head (possibly for the goddess Sekhmet) at each prow is devouring an Asiatic. The enemy Philistine ships are distinguishable by a bird at either end. On the shore stands a huge figure of the pharaoh who has driven up by chariot to witness the spectacle. He is drawn as tall as his ships and is shown shooting arrows at enemies trying to land. To prove that his fleet was victorious, one scene shows his boats headed in the opposite direction from the one in which they had fought. His chariot stands facing home.

Tuthmosis III, mighty conqueror of Palestine, Syria, and Phoenicia in the fifteenth century B.C., commandeered strong boats of cedar, built behind the Lebanese coast and carried on carts as far east as the Euphrates. On one of his triumphal returns home to Egypt, he carried, as Steindorff points out, bodies of seven northern princes fastened to the prow of his royal flagship, even as Romans fastened their captives to chariot wheels. Since earliest times, Egypt had traded by sea with Semitic Phoenicians (northern Canaanites) in sailing boats known as "Byblos travelers" because they carried home from this port cargoes of wine, papyrus pith for "paper" scrolls; oils for mummification; fancy wood for choice furniture; and cedar for mummy cases, masts, and flagpoles. They left, in exchange, gold, fine metal wares, perfumes, and writing materials. Current Egyptian postage stamps show one of the famous ships of Queen Hatshepsut (1504-1482 B.C.) on a voyage to Punt, possibly on the Somali coast of the Red Sea, searching for luxury wares.

A picture of the typical Phoenician ship of the tenth century B.C. appears on a Lebanese stamp. We deduce the prowess of the Phoenician merchant marine from the collaboration it was able to give Solomon in the tenth century B.C. Phoenician boats carried traders from their narrow coast all the way across the Mediterranean and established posts on islands and shores which became distributing points for Levantine culture. African Carthage and Hippo and Spanish Cadiz are illustra-

tions in point. Phoenicians carried abroad on their little trading ships what the self-sufficient Egyptians found too troublesome to export. Yet, in Egypt's early energetic years, c. 3000 B.C., she subjected the lords of Phoenicia and made even Byblos a hieroglyphic-writing port, whose citizens worshiped in Egyptian temples, the ruins of which we have seen and photographed. From the era of Alexander the Great, Phoenician ships were, like Phoenician culture of that era, distinctively Greek.

Albright, commenting on the infiltration of Greek pottery into Syria and Palestine even in the age of Solomon and David, calls attention, in *From the Stone Age to Christianity*, to the presence of Greek traders and mercenaries in western Asia from the early seventh century B.C. on. "As early as the 6th century B.C.," he says, "the coasts of Syria and Palestine were dotted with Greek ports and trading emporia, several of which have been discovered during the past ten years. None of these could approach the prosperity of the great Hellenic harbors of Naucratis and Daphnae in Egypt."

SOLOMON'S COMMERCIAL FLEET

To this we have already referred in *Business Transactions*, where Solomon's smeltery and iron-shipping port of Ezion-geber is stressed. When the third Hebrew king called on Hiram for collaboration at sea, he was using the sea fever of his Phoenician cousins. Solomon "had at sea a navy of Tarshish [a smeltery fleet?] with the navy of Hiram: once every three years came the navy of Tarshish, bringing gold, and silver, ivory, and apes, and peacocks." This was a happier partnership than Greek-Phoenician relations, which resulted in the downfall of Phoenician mercantile prestige.

CARGOES FOR BABYLON

Sea-borne cargoes for Babylon arrived via the Persian Gulf from India and farther east, bringing spices and luxury wares to the mouth of the Tigris-Euphrates at Basra. The Gulf of Suez, along the west coast of Arabia, was also a much-used waterway, whose cargoes were trans-

shipped by caravans along the Petra-controlled highways north and east through oases in the desert between Syria and Mesopotamia. The latter route was unpopular in centuries when Solomon's Tadmor (later Palmyra) was controlling trade with the Euphrates Valley from her strategic position on the Syrian Desert's edge.

For Mesopotamian river traffic downstream, boats of round reed-basket work were satisfactory when caulked with bitumen. These were ancestors of the round Assyrian skin boats and rafts of timber on inflated skins used before 700 B.C., and ancestors, too, of the round guffahs still used on the Euphrates (illus. 237).

CRETAN SEA-LORDS AND CYPRIOTES

Island Crete was a major shipping center in the midst of the eastern Mediterranean. Lying southwest of Asia Minor, southeast of Greece and her islands, north of Africa, and west of Syria and Palestine, it was inevitable that as early as 1500 B.C. Crete with her sea-kings' wealth should push out in every direction, receiving and distributing cargoes. This activity continued for many centuries and led to the foundation of the fabulous wealth of the Minoan sea-kings.

From her northern port of Heracleion near Knossos, galleys and sailing vessels put out for Athens, for "the isles in the midst of the sea," for Troy and the Hellespont and Propontis (Dardanelles and Sea of Marmora today), and for Rhodes and the cities of Asia Minor. Then they cut across to a northern port of Cyprus and thence in a direct line to Ugarit (Ras Shamra), a great Canaanite city and center of trade and culture in northern Syria. From here the coast road south along the Mediterranean was easy and open. And here routes started over the Syrian Saddle for contact with the Mitanni people, the Hurrians near Lake Van, and the thickly settled towns of Assyria along the Tigris-Euphrates.

Sea-borne traffic from Crete also proceeded from Phaestos, her southern harbor, direct south to Libya and what we know as Bardia, or southwest to Cirenaica; a slightly longer route southeast led to the

Nile Delta ports. He who held the sea lanes of Crete in Bible times, as now, could master the eastern Mediterranean, even as he who holds the strategic Sicilian Straits controls the sea lanes in the western basin of the inland sea.

Shipping lanes to Crete from Syria were linked with overland routes from Ras Shamra on the north Syrian coast, forming one of the oldest trade routes between east and west, with Ugarit (Ras Shamra) as a key point. Wares of the Aegean islands and southern Asia Minor were conveyed to Mesopotamia even in very ancient times, for the land "between the Rivers" was deficient in building stone for its huge monuments and social structures in which the Chaldeans and Assyrians delighted. Sargon himself may have used the Ras Shamra route to invade countries along the Mediterranean.

Portions of the north end of a great trade route across Crete have been found at Knossos. This ancient Minoan route indicates close commercial alliance with Egypt. The road ran south of the palace and led to a remarkable caravansary equipped even with foot-paths.

Cyprus, too, with ports such as Paphos and Salamis, was a pivot of sea-borne traffic in Bible times, moving its ships to Ras Shamra in northern Syria; to Seleucia for Antioch; to Phoenician Arvad, Byblos, Sidon, and Tyre; and to Acco (Ptolemais), Caesarea, Joppa, and Alexandria. Paul used ports of Cyprus on sea trips to Asia Minor and the west. Barnabas was born in Cyprus. For references to Cyprus see Acts 4:36; 13:4; and 15:39 and our section on Islands. The terra-cotta votive ship from the Iron Age (1200 B.C.) in Cyprus, found by excavators, reveals a shape used for centuries on the Mediterranean. The helmsman at the bow and the abrupt, broken-off effect of the stern are striking. Compare the stern and bow of this ship with those of Egyptian barges, illus. 207. Ships of Cyprus, like most other early Mediterranean ones, were propelled by both sails and oars.

PAUL'S SEA WAYS

Paul used many coastwise shipping lanes for safety. Some of the busiest crescent-

shaped harbors of the eastern seaboard were only a few miles apart. The Apostle coasted from Ephesus to Troas, from Tyre to Ptolemais (Acts 21:7), and from Ptolemais to Caesarea (v.8). Boats were often so small that passengers sometimes slept ashore and continued the next day. This must have been hard on port citizens whose sea-minded friends often dropped in for the night as Peter did with Simon the Tanner at Joppa, "whose house [was] by the seaside" (Acts 10:6).

Yet night sailing was skillfully practiced when necessary. Greeks steered by the Great Bear and Phoenicians by the Lesser Bear (our Large and Small Dippers).

RIVER ROUTES

River-borne traffic found the Nile the most useful stream in Bible lands. Illustration 207, showing stone-bearing flat river boats, with decorated upturned prows and unfurled sails, gives a glimpse of how Nile boats have looked for more than 3,000 years. River transportation played a major role in conveying obelisks and the huge masses of stone used in temples and pyramids. For 2,900 miles the Nile is navigable. When the great yardage of canvas is unfurled on small cargo boats, considerable power is available.

Since prehistoric times, Nile ships have had upturned prows and have been propelled by punting-poles pushed into the mud, as we see in our picture. The pleasure boats, *dahabiyas*, still used on the Nile, look much like predynastic ones, with awninged cabins or palm-branch screens at the stern. In such a boat Breasted and his family made many a voyage, patiently copying ancient inscriptions in the Nile Valley.

Paul and Barnabas probably used the River Cestrus to sail from Pamphylian Attelcia to Perga, walking from there to Pisidian Antioch, as Ramsay suggests. When the Apostle came to Troas (Acts 16:8) he probably walked along the River Rhyndakos, making a Granikos River crossing. He used easy grades along water-courses whenever possible because of his physical disability. Paul was walking along a river on the desert outskirts of Damascus when he had his blinding vision of Christ.

He could not cover more than fifteen or twenty miles a day at best. His peripatetic preaching had a counterpart eighteen centuries later in the walking Methodist, John Wesley.

Not a useful stream for commerce, in spite of its conspicuousness in the topography of the lands it waters, the Jordan is hostile even to canoes. Flat-bottom ferries at fords, such as conveyed the household effects of fugitive David over the stream (II Sam. 19:18), are the best transport it has afforded.

In the centuries when Rome was using Ostia as her main port and pantry, the Tiber was navigable between this Tyrrhenian harbor and the capital. Revelation refers to marine magnates who lived at Rome ("Babylon") and became rich from their ships—vessels with cargoes of gold, silver, linen, pearls, purple cloth, metals, spices, oil, flour, wheat, cattle, slaves, sheep, chariots, horses, and "the souls of men" (18:13).

Excellent portrayals of such Italian ships as Paul knew appear in the Ostia mosaics, illustration 206. These art gems, which ornamented the floors of commercial offices in the Ostia Chamber of Commerce in early Christian centuries, show high-prowed ships, sailors, lighthouses, and altars, where propitiative sacrifices were burned on the eve of sailing to invoke favor from Neptune, god of the sea.

A careful study of Paul's Mediterranean routes shows that from November until March he had to mark time on shore until weather permitted ships to put to sea. His wreck off Malta was due to an unseasonable sailing (Acts 27:9). The details of his taking from Lycian Myra a large Alexandrian grain ship called "The Twin Brothers," bound for Italy, reveal the importance of Egyptian merchant marine in the first century A.D. Such ships were surprisingly large. "The Twin Brothers" was carrying 276 souls when wrecked on the Maltese beach (Acts 27:37). The Roman historian, Lucian of Samosata, tells of a certain Egyptian ship, "The Isis," driven into Piraeus, harbor of Athens. It was 180 ft. long, with a beam of 45 ft. and a hold 43 ft. deep. The rations she carried for her crew would have fed Athens for a year, he notes.

Typical sea journeys of Paul were from Antioch to Salamis, from Caesarea to Rhodes, from Cenchreae to Ephesus, and from Ephesus to Caesarea.

Three of the most trustworthy early accounts of ancient navigation are Ezekiel's description of the ship "Tyre" (27:3-9, 25-36); the Odyssey of Homer; and the "log" of Paul's cruise across the Mediterranean from Caesarea to Malta, recorded in Acts 27.

FUTURE ROADS THROUGH BIBLE LANDS

As silently as many other gifts have come to Bible lands, the last rail link connecting Cairo with Constantinople was quietly completed in September, 1942. The ninety-mile stretch between Haifa and Beirut, capital of Lebanon, built in double-quick military time, may in the future prove a "highway for our God." It is to be hoped that peaceful citizens of neighbor countries in ancient Bible lands, and caravans of their self-made merchandise and locally grown fruits, may penetrate through the community framing the eastern seaboard of the Mediterranean which cradled not only Christianity, but Canaanite, Hebrew, and Moslem faiths. Syria, Palestine, Transjordan, Iraq, Iran, Anatolian Turkey, and Saudi Arabia now have access to one another as never before. They will not need in the future to import so much coffee, cloth, grain, fish, or eggs, if they, through constantly improving roads, make their Near East a self-supplying neighborhood, using the ancient ways of bartering boots for cloth, or brides for cattle.

A cable from Jerusalem to The New York Times prognosticates: "The time may not be far distant when the historic caravan routes across the great hinterland deserts will be noisy again, not with camel convoys, but with trucks bearing Palestinian citrus fruits and finished merchandise in exchange for Iraq wool, dates and meat; and Egyptian rice or sugar for Syrian potatoes."

The middle eastern railroads constructed under Allenby in 1917 during World War I proved a prelude to the civilian prosperity of 1929. Those pushed through

during World War II will even more effectively be links of Christian progress and brotherhood, provided Christian,

Arab, and Jewish citizens of Bible lands work out a technique for common-sense cooperation.

ADDITIONAL BIBLE REFERENCES

"They that go down to the sea in ships,
That do business in great waters;
These see the works of Jehovah"
(Ps. 107:23)

"So he bringeth them unto their desired
haven" (Ps. 107:30)

"The good way wherein they should walk"
(II Chron. 6:27)

"I was ashamed to ask of the king a band
of soldiers and horsemen to help us against
the enemy in the way" (Ezra 8:22)

"I shall walk at liberty;
For I have sought thy precepts"
(Ps. 119:45)

"That set out to go down into Egypt" (Isa. 30:2)

"Let us go up to the mountain of Jehovah
... and he will teach us of his ways" (Mic. 4:2)

"Go ye therefore unto the partings of the
highways, and as many as ye shall find,
bid to the marriage feast" (Matt. 22:9)

"I must go on my way to-day and to-
morrow and the day following" (Luke 13:33)

"Walk while ye have the light" (John 12:35)

"Passing along by the sea of Galilee, he
saw Simon and Andrew" (Mark 1:16)

BIBLIOGRAPHY

American School of Classical Studies, 16th Report, "Sacred Way at Athens," *Hesperia*, Vol. 8, No. 3, July-September, 1939.

Breasted, James H., *The Dawn of Conscience*, Charles Scribner's Sons, New York.

———, *Earliest Ages*, Ginn and Company, Boston.

Garstang, John, *The Heritage of Solomon*, Williams and Norgate, Ltd., London.

———, "Hittite Military Roads in Asia Minor," *American Journal of Archaeology*, January-March, 1943.

Glueck, Nelson, *The Other Side of the Jordan*, American Schools of Oriental Research, New Haven.

Lawrence, T. E., *Letters*, Doubleday, Doran & Company, Inc., New York.

Manson, T. W., *A Companion to the Bible*, T. and T. Clark, Edinburgh.

Matthews, Basil, *The World in Which Jesus Lived*, Oxford University Press, Oxford.

McCown, Chester C., *The Ladder of Progress in Palestine*, Harper & Brothers, New York.

Petrie, Sir Flinders, *The Wisdom of the Egyptians*, British School of Archaeology in Egypt, London.

Pope, R. Martin, *On Roman Roads with St. Paul*, The Epworth Press, London.

Ramsay, Sir William, *The Cities of St. Paul*, A. C. Armstrong & Son, London.

Rostovtzeff, M. I., *Caravan Cities*, The Clarendon Press, Oxford.

Smith, David, *The Life and Letters of St. Paul*, Doubleday, Doran & Company, Inc., New York.

Souter, A., "Roads and Travel," *Dictionary of the Apostolic Church*, Vol. 2, Charles Scribner's Sons, New York.

Steindorff, George, and Seele, Keith, *When Egypt Ruled the East*, University of Chicago Press, Chicago.

Woolley, C. Leonard, and Lawrence, T. E., *The Wilderness of Zin*, Charles Scribner's Sons, New York.

SOCIAL STRUCTURES

One of his disciples sayeth unto him, Teacher, behold . . . what manner of buildings!

—Mark 13:1.

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INTRODUCTION

THE GREGARIOUS EAST

When the curtain of history rises on people of Bible lands, they already display a well-developed social sense, fostered by desire for protection and companionship in lonely places. Tribes and clans clung together against outside enemies. Heads

were frequently together in counsels. Long before any social structures were built, long before broad open spaces were provided between walls at city gates where judge or king and people met, there was the gathering together of neighbors such as we still see after sunset. Then swathed women of Damascus walk out along the road below the city wall conversing in whispers, or women of Jerusalem crouch in the Moslem

and Jewish graveyards lining the Kidron Valley. The trio of veiled Arab men sitting on the sidewalk in illustration 28 may be just such a social scene as inspired the words of Jesus, "Where two or three are gathered together in my name, there am I in the midst of them." It was a long step from such a little group to the stately "halls of Zion, all jubilant with song," and to what Bernard of Cluny called "the social joys" of Jerusalem the Golden.

EARLIEST PUBLIC STRUCTURES

AT TEPE GAWRA

At Tepe Gawra in northern Mesopotamia the earliest social structures yet found anywhere in Bible lands have been excavated (illus. 208). They date from c.4000 B.C. and represent a far better type of stone structure than was thought possible in that early age. For Tepe Gawra was abandoned in the era of Abraham and was at that time at least 3,000 years old. The group of foundations excavated by the American Schools and the University Museum of Philadelphia formed an acropolis with temples and other units, such as developed millenniums later on Greek hills or crowded the Roman forums that were cluttered with altars, arches, senate chambers, rostra, palaces, basilicas, and sacred ways in the time of Paul.

SEVEN WONDERS THAT SERVED COMMUNITIES

Every one of the ancient structures that came to be known as the "Seven Wonders of the World" had a socially beneficial mission, unless we except the *Hanging Gardens of Babylon*. The tremendous statue of the enthroned Zeus, constructed by Phidias for the temple at Olympia in Grecian Elis, was considered "the loftiest embodiment of divinity in art." The mere beholding of it was sure to make the witness forget his troubles and sleeplessness, no matter how trying his problems. The towering zoned *Pharos lighthouse* at Alexandria, constructed by

order of Ptolemy Philadelphus in the third century B.C., was a beacon 350 to 600 ft. high, visible 27 miles out in the Mediterranean, guiding mariners to safety even as the shining spear point of Minerva on the Athenian Acropolis helped sailors round windy Cape Sunium. The fourth social structure of these Seven Wonders was the *Temple of Diana at Ephesus*, seen by Paul and by his successors for generations after. Begun in c.350 B.C., it was given a gorgeous façade of eight Ionic columns and a colorful pediment of carved statues. The polychrome bases of its columns made it warmer than the cold Greek temples of Athens. The gifts of jewels and precious metals, which went into its foundation, may have suggested Paul's warning against "foundation [of] gold, silver, costly stones, wood, hay, stubble" in contrast to the only sure foundation, "which is Jesus Christ" (I Cor. 3:11-13). The *Colossus of Rhodes*, which stood on the site of the present Tower of St. Nicholas in the harbor of Rhodes, was a bronze figure of the sun-god about 100 ft. high, facing arriving sailors as the Statue of Liberty faces incoming ships in New York harbor. The sixth social structure which amazed the ancient world was the *tomb of King Mausolus at Halicarnassus* in Asia Minor, which has influenced many public structures since its lofty construction in 353 B.C. The last of the marvels of antiquity was the *Pyramids of Gizeh*, which, alone of the seven, are intact except for surfacing looted long ago. Looming through palms of Mena's gardens, these three massive tombs impress us still as a wonder of all time. They appear to be hanging in the sunset air above the desert rimming Cairo (illus. 13). Most striking of all they have appeared to us as we crouched at their base in the moonlight or saw them suddenly peer above us over the swimming pool of the Mena House at tea-time.

Yet all superlatives are relative to personal opinion. There are many who would class the Temple of Solomon or that of Herod at Jerusalem as a wonder of the ancient world. Many would include the chariot cities of Solomon or Hezekiah's Siloam Tunnel at Jerusalem.

BARRACKS, PRAETORIUM, JUDGMENT-SEAT

Barracks adjoined many palaces of antiquity. They were the usual dreary places that soldiers' quarters always are. Garstang found at Mersin mound near Tarsus, birthplace of Paul in southern Asia Minor, a defense rampart of the Chalcolithic Age (c.4000-3000 B.C.) with a series of barrack rooms abutting on it, a guardroom, and an eloquent mounting block used when animals came prancing for their riders.

In Jerusalem of Jesus' time, soldiers of Rome were lodged in barracks at the Praetorium and also near the Citadel of Herod close by present Jaffa Gate. Some of the garrison were quartered in the lower city, near the Castle of Antonia, where they kept public order in the Temple Area. From here guards were summoned when Paul was arrested in the Temple Area because someone thought he had brought a Gentile into that holy place; and when Peter and other apostles were apprehended for healing and teaching more converts than the priests and Temple authorities relished. From one of the first-century barracks of Jerusalem, soldiers came to the Garden of Gethsemane to arrest Jesus; and to these sordid barracks the soldiers returned who had taken part in the crucifixion of our Lord at Golgotha. Paul used his barrack-room friends of "the whole Praetorian Guard" as an audience before whom he glorified Christ.

The Praetorium was the residence of a provincial governor, such as Pilate, in Jerusalem. Some authorities believe it to have been in the palace of Herod in the upper or western part of Jerusalem. Probably it was near the present Convent of the Sisters of Zion, on the Via Dolorosa; or on the site of the Moslem School of Kuliya Rawdat el-Ma'arif, which is regarded as the site of the Tower of Antonia. This general location appeals to us as the Praetorium to which Pilate summoned Jesus. When Pilate asked, "Art thou the king of the Jews?" Jesus replied, "Thou sayest that I am a king. To this end have I been born, and to this end am I come into the world, that I should bear witness unto the truth. . . . Pilate saith unto

him, What is truth?" (John 18:33-38) And in the court of this Praetorium, Roman soldiers "platted a crown of thorns, and put it on his head, and arrayed him in a purple garment." Jesus therefore came out before the Jews as Pilate said, "Behold the man!" And it was into the Praetorium or castle that Jesus was taken again by Pilate who tried to release him, but the Jews cried out that he would not be Caesar's friend if he released Jesus. "When Pilate therefore heard these words, he brought Jesus out, and sat down on the judgment seat at a place called The Pavement. . . . And he saith unto the Jews, Behold your King!" (John 19:1-16)

No site in Jerusalem brings us closer to the trial of Jesus than a section of first-century Roman pavement under the Church of the Sisters of Zion, whose altar incorporates a portion of the Ecce Homo Arch and part of the moat which may have guarded the fortress of Antonia. Down here below the present street level, we have been awed by the pavement scratched with squares of a gaming-board. Here Roman soldiers could have played while waiting for the trial of Jesus to end at the Praetorium above. The proclivity of Roman soldiers to while their idle hours with games again shows up at the crucifixion, where they cast lots for the garments of Jesus, including his seamless robe.

Herod had another Praetorium or palace at Caesarea, which figured in the trial of a second famous prisoner, Paul of Tarsus, by Governor Felix (Acts 23:35).

The judgment seat of Gallio the Proconsul of Achaia (Greece) was another well-known social structure. We have seen the location of this tribunal at Corinth, in the basilica or business center, just off the forum surrounded by the longest stoa of shops in all Greece. Paul had been preaching in the Jewish synagogue at Corinth but, when blasphemed by his hearers, went into the home of Titus Justus, who lived next to the synagogue. When many Corinthians believed and were baptized, Jews trumped up charges and hailed Paul before Gallio's judgment seat. But the tactful proconsul drove the crowd from his place of authority, saying that the case did not come under his jurisdiction. As he dis-

missed it, the rabble fell on Sosthenes, ruler of the synagogue, and "beat him before the judgment seat. And Gallio cared for none of these things" (Acts 18:12-17).

BATHS

GRAECO-ROMAN

Elaborate baths came into the ancient world with the Greek era and the succeeding Roman age. People in most ancient Bible lands seem to have given little heed to personal hygiene. If they used water on their persons, it was most often as a libation in some sacred rite, or on an occasion of healing, as when Naaman the leper dipped himself seven times in the River Jordan. Egyptians had private bathrooms in some of their palaces and also bathed in the Nile, where tall papyrus reeds made shady screens. Pharaoh's daughter was coming for such a "dip" when she discovered the infant Moses in his little boat of reeds. But no lavish bath establishments have been found in Egypt comparable to those still surviving from the first century after Christ at Pompeii; and at Baiae north of Naples, the brilliant watering place where Roman emperors and courtesans indulged in their treatment of hot steam, oil massage, and invigorating coolings-off by swims in the pool. Gymnasiums for men and for women provided setting-up exercises. The clothes lockers of the first-century Stabaeon Baths at Pompeii are still in place. Roman baths, such as Caracalla's, included a library and an art gallery graced by statues like the Laocoön.

PALESTINIAN

King Herod of Judaea was an Idumaean. Yet he copied his Roman superiors in the Empire of Augustus by maintaining elaborate baths. When ill, he also visited the famous warm mineral baths beyond the Jordan at *Callirhoë*. Today patients use the curative properties of the chemical-impregnated waters of the weird Dead Sea, 1,300 ft. below the level of the Mediterranean. They drive down from Jerusalem, take their treatments at Kallia or

elsewhere, and return to the capital for late luncheon. Dead Sea health resorts are growing in popularity every year. They are patronized by victims of rheumatic, heart, and bronchial disorders.

Two pools of water believed to have healing properties existed in biblical Jerusalem. One was the *Pool of Bethesda*, an old healing bath—possibly the body of now impure water under a small tower approached by a shaft 80 ft. below the surface of the city. According to John, this pool had five porches where sick lay waiting their turn to get into the supposedly medicated waters—a miniature Lourdes. The other was the *Pool of Siloam* in whose periodically rising and falling waters running from the Virgin's Fountain outside the city wall Jesus told one of his blind and penniless patients to wash after the Master had applied spittle-clay to his eyes. "He . . . washed, and came seeing." There is no reason to believe that waters on the plateau of Jerusalem had any actual curative mineral properties. If they healed, we must look for another explanation. It is notable that John, not Luke the physician, records both of these pools of healing.

"*The Pilgrims' Bathing Place*" at the Jordan River is crowded each Easter by Greek Orthodox pilgrims, remembering the baptism of Jesus by John. In a ceremony dating from the sixth century, they plunge into their sacred bath, from which they claim great spiritual blessings, even as Greek mystery cultists dipped into the salty lake near Eleusis.

Tiberias on the Sea of Galilee was famous in the first century, as it still is, for medicinal baths and hot springs, praised by the Roman historian Pliny. We have seen an enterprising modern Jewish bath establishment at Tiberias advertising its benefits in three languages. This health resort was originally established by Herod Antipas and, because of its evil associations, seems to have been avoided by Jesus when ministering in the lake-side community. Doubtless it was equipped with the same elaborate Roman system of hot and cold water pipes as we have seen at excavated Ostia, port of Rome. Romans were well in advance of their neighbors in all matters of public sanitation. Marble seated toilets have been excavated at

African Sabrata. This ancient Tyrian colony, which became a Roman grain-shipping center west of Tripoli, was blessed with twelve fountains, fed by an aqueduct. There was also a water-flushed latrine at Corinth on important Lechaum Road, as one approaches the market place along this main street (illus. 205). Another at Ostia has been excavated.

CORINTHIAN

It is natural that Corinth, with its many copious fountains, should have elaborate public baths. We have seen their ruins in the recent excavations—the extensive baths of Eurycles east of the main Lechaum Road. The Baths of Hadrian were possibly out beyond the great amphitheatre northwest of the city.

AT ANTIOCH AND OSTIA

The most artistic baths in the ancient East were at Antioch, where people were first called "Christians." This city on the north coast of Syria, part of Turkey since 1939, had villas and baths whose mosaic floors, laid between the first and fifth centuries A.D., were lavish in extent and beauty. The vast area of Antioch has been surveyed and laid out in *insulae* as at Pompeii, by expeditions from Princeton University, Worcester Art Museum, and the Baltimore Museum of Art.

The baths of Ostia, which in the first century was a main port for Rome, receiving merchandise from Africa and the west, were decorated with extraordinary black and white mosaic floors depicting Neptune and creatures of the sea. Some of these decorations are extant.

GYMNASIUMS

Gymnasiums were popular social structures all over the Graeco-Roman world of Paul. Usually they adjoined the baths, where exercise was part of the routine. Paul's allusions to striving to win prizes in the games (I Cor. 9:24) and to contending in the games (II Tim. 2:5) may be drawn from his observations in the gymnasiums and theatres at Corinth, where he lived for eighteen months at one time. At

any rate, it was to his Corinthian friends that he wrote: "Every man that striveth in the games exercises self-control in all things. . . . I buffet my body to bring it into bondage." We hear an echo of Paul's experience in the Corinthian or some other amphitheatre, in his words, "If also a man contend in the games, he is not crowned, unless he have contended lawfully."

HOSPITALS

The Asklepieion of ancient Corinth indicates how early the general hospital made its appearance as a social structure. In this building adjoining the temple to the god of healing, a shaded colonnade, a sacred fountain, a statue to Hygeia, and many terra-cotta votive offerings of arms, legs, and other parts of the body which had been healed were found. Also, couches for the sick have turned up. This Asklepieion seems a forerunner of the Hospital of the Knights of St. John at Rhodes in the Middle Ages. It is located across the fields north of the theatre, beyond the gymnasium, at the edge of the cliff above the coastal plain where it catches every sea-borne breeze.

On the Aegean island of Cos, birthplace of Hippocrates in 460 B.C., the father of medical science, whose name lives in the Hippocratic oath taken by every physician today, attended an Asklepieion—first medical college in the world. He studied "case reports" left by cured patients and laid the foundations of modern medicine by separating sheer priestcraft from science. He wrote treatises and prescribed thermal treatments used throughout the eastern Mediterranean world about the time when the Jews were returning from Babylonian Captivity. Athens, also, had a famous center of healing inside the Sanctuary of Asklepios in the rock below the Acropolis. This site became influential during the plague of 429 B.C. Patients slept in the shrine of the god in hope of cure.

HOUSES OF ILL FAME

The establishment of Rahab the harlot, conspicuous on the walls of Jericho and visited by information-seeking spies of Joshua who knew that they would here be

informed of current news, is a sidelight on an ancient profession. The earliest Mosaic laws protested against it. But it was so deep-rooted that it persisted boldly in New Testament times, when the corrupt King Herod, for example, built himself a pleasure house on an artificial, conical hillock, Frank's Mountain, still seen south of beautiful Bethlehem. Parts of many pagan temples in Bible lands were given over to sacred prostitution in the name of goddesses of fertility—Asherah, Isis, and earth-deities. No wonder Elijah protested (II Chron. 21:8-13) when Edom revolted against Judah, built high places in the mountains of Judah, and "made the inhabitants of Jerusalem to play the harlot," like their neighbors east of Jordan.

The social curse of harlotry was known to Jesus, who, when one woman taken in adultery was brought before him by scribes and Pharisees for censure, turned the searchlight upon their own self-righteousness (John 8:1-11), rather than upon the unfortunate victim of commercialized vice. On more than one occasion, he tried to correct hypocrisy by saying that even harlots would enter the Kingdom before men whose works appeared more pious than they actually were.

The first-century houses of prostitution extant at Pompeii, shown only to men visitors by the genteel custodians, are decorated with frescoes portraying vividly every phase of the lewd activities which went on there.

LIBRARIES

EGYPTIAN

As social structures, libraries are far older than we might imagine. Originally they were parts of temple precincts, as at Egyptian Heliopolis, a city of sacred culture where Moses and Joseph both may have schooled themselves in "the wisdom of the Egyptians." We know that the Fourth Dynasty ruler Khufu, as well as Khafre, builder of the Second Pyramid at Gizeh, had collections of tablets and papyri kept in custody by scribes. The archives of Akhenaton at Tell-el-Amarna have yielded 300 clay tablets of correspondence between

petty rulers and the pharaohs, which shed much light on life in Palestine and its neighbor lands in the fourteenth century B.C. This oldest body of official correspondence in the world includes one tablet written to the Egyptian king by his deputy governor of Jerusalem, reporting that the Khabiru (Hebrews) were invading all the cities of Palestine and that he could do nothing to stop them. This is a valuable sidelight on the Hebrew infiltration into Canaan. The Amarna Letters were found chiefly in a store-chamber which was identified by marks on its bricks as "the place of the records of the palace of the king."

For Alexandrian Library, see page 170.

BABYLONIAN

Several libraries of baked clay tablets, inscribed with wedge-shaped cuneiform letters made with a sharp three-cornered stylus, have come to light from ancient Bible lands. The French scholar De Sarzec found at Lagash in southern Babylonia thousands of such tablets dating from the era of the noble ruler Gudea (c. 2300 B.C.). The library which housed them vanished long ago. But these indestructible little bits of mother-earth survive—always the most priceless evidence a site can yield to tell its story.

At Nineveh two great libraries have yielded more than 20,000 tablets, including fragments of a Babylonian cuneiform record of the great Flood disaster, possibly the flood of Gen. 7; also, portions of a Sumerian deluge and creation legend are interesting to compare with the opening chapters of Genesis. For an ancient Babylonian clay tablet see illustration 75. The famous Library of Assurbanipal (seventh century B.C.) at Nineveh was an enlargement of the structure begun by his grandfather Sennacherib. Excavators found a dramatic lion-hunt relief on the walls and saw on the floor thousands of clay tablets in heaps. Some of these are of inestimable value to Bible scholars because they contain cross references to events recorded in Scripture. Assurbanipal was contemporary with Ahab of Israel. He was a studious king and wished to make his Nineveh the capital of world culture. To this end he not

only built the great library, destroyed ultimately by enemies' fire, but also revived literature. Hence, he had scribes prepare syllabaries appreciated best under a magnifying glass. Three parallel columns are written—Sumerian at the left and Assyrian at the right, with a center column of explanation in cuneiform.

Many of the tablets from Assurbanipal's Library are in the British Museum.

CANAANITE (UGARITIC)

The most recent discovery of a library from ancient Bible times is the one at Ras Shamra, in northern Syria. Here the library of a vast temple school has been excavated by M. Schacffer. Thousands of sand-preserved clay tablets are opening up to us not only the lost literature of these early Canaanite people of culture but documents showing how priests trained acolytes to write and read in the proto-Phoenician Ugaritic alphabet of thirty signs. They used Accadian for business transactions with Assyria and Babylonia, and classical Sumerian for literary works. It will take many years for translators to catch up with the wealth of written material brought back to light of day at Ras Shamra's temple library and school. Some letters found here are of the same period as the Tell-el-Amarna Letters found in Eighteenth Dynasty Egypt, from the era of Tuthmosis III (1482-1450 B.C.) to that of Amenhotep IV (c.1387-1366 B.C.).

PALESTINIAN

The Jerusalem Temple Area included safe storage place for the sacred archives of the Hebrews, even as their neighbors' temples had libraries for tablets, papyri, and parchments. We find traces of the Jerusalem Temple library guarded by the scribes in the story of the lost Books of the Law which, after a period of complete oblivion, were found in the reign of King Josiah when he was repairing the Temple (II Kings 22). The laws of God had been so neglected during his predecessors' reigns that incense had been burned to "other gods." Nobody seemed even to know where the Book of the Covenant was.

But when Hilkiah the priest went up to

hand over to the repairmen the money gathered from the people for reconstruction, he found among the rubbish in the house of Jehovah the rolls of Books of the Law. Eagerly he reported his find to the scribe, Shaphan, who told King Josiah. The letter commanded his holy men, including Isaiah, to see what was God's will about this neglected book. Beautiful was the scene when the king gathered all the inhabitants of Jerusalem, great and small, together with their religious leaders, into the House of Jehovah. And the king stood by the pillar, reading to his subjects "all the words of the book of the covenant which was found in the house of Jehovah." Afterwards, he and his people made a solemn covenant to keep with their heart "the words . . . that were written in this book" recovered from the Temple library (II Kings 23).

In Scripture there are other references to rolls or parchments of sacred writings stored in archives at the Temple. Word came from God to Jeremiah to "take a roll of a book, and write therein all the words that I have spoken . . . against Israel." Calling Baruch, his amanuensis, Jeremiah had the man prepare such a book, which was read to the princes in the scribe's chamber of the king's house. But when the roll was read before King Jehoiakim, he was so enraged, as he sat that damp day in his winter house, with a fire burning in the brazier beside him, that he "cut it with the penknife, and cast it into the brazier, until all the roll was consumed." This destruction of an unwelcome message did not deter Jeremiah and Baruch from preparing a duplicate copy of the book which again went into the Temple library in the scribes' chamber (Jer. 36).

The Old Testament books were written on tablets, and on parchments made from animal skins carefully treated. The Greek books of the New Testament were written on "paper" made of Egyptian papyrus reeds skillfully worked into sheets and rolls, and on parchment. Pens of hollow reeds, brushes, and later quills were used to apply the black ink, which was made of vegetable soot mixed with gum and moistened on palettes as the writer needed it. The better sort of black ink found in first-century Pompeii and Herculaneum, like

our best black ink today, was made of nutgalls, sulphate of iron, and gum. Red ink was made of expensive vermilion or cheap ochre. When Byzantine Christian emperors, with elegance characteristic of the sixth century B.C., were preparing superb manuscripts, they ordered royal-purple ink or even purple-dyed vellum inscribed in gold or silver, as we have seen in the Morgan Library of Manuscripts. Our oldest New Testament manuscripts are in the form of codices, parchment books, made up of quires of four or five sheets folded once to make pages. For details of these early records of the New Testament, see in encyclopedias, "Codex Sinaiticus" or "Codex Vaticanus." When vellum writings were scraped off and a second message written on the same material, the manuscript was called a "palimpsest." The Greek letters, written in parallel columns with meticulous neatness, presented pages of superb beauty. The Codex Sinaiticus, found in the Monastery of St. Catherine on Mount Sinai in 1844, has 326½ leaves written in brown ink in the fourth and fifth century A.D. It includes the whole of the New and portions of the Old Testament.

ASIA MINOR

The most noted Graeco-Roman library in Asia Minor was at Pergamum, from which German scholars a generation ago removed thousands of tablets.

Philosophers and scholars of ancient Greece prided themselves on their libraries. Most famous were those of Pisistratus, dictator of Athens in the sixth century B.C., and of the philosophers, Aristotle and Plato. The vast library building erected at Alexandria by Ptolemy Philadelphus in the third century B.C. aimed to have a copy of every extant book in the Mediterranean world. We know the names of its first five librarians and give them credit for working out cataloguing systems. Alan Rowe, Australian Director of the Alexandria Graeco-Roman Museum, recently reported finding silver, gold, and bronze plaques proving that Alexandria had not only a great Serapeum dedicated to the deification of the Apis bulls but "the world's greatest library." The latter, Rowe says, was in the harbor section, close to

the royal palace. Ptolemy III, who enlarged the library built by his predecessor, required that foreigners deposit all their books there, giving them official copies in return. He is reputed to have forfeited the enormous sum he paid to Athens as a deposit, rather than return rolls of plays written by Aeschylus, Sophocles, and Euripides. His catalogue is said to have contained 490,000 items of papyrus rolls.

Libraries in connection with temples of Rome were numerous. The first public libraries of the world seem to have sprung from this "eternal city," which in the third century boasted twenty-eight of them.

PALACES

BIBLICAL PALACES IN GENERAL

Massive palaces, protected by bulwarks of masonry, appealed to the imagination of the poor populace of Bible lands. They have always appealed to the proletariat. They offer something "to look up to," to make payments of taxes for, to be excluded from. The Bible refers to "Shushan the palace," palaces at Babylon, the palace of Benhadad of Syria (Amos 1:4), that of Ashdod (Amos 3:9), and palaces in the land of Egypt. Citizens liked to salute their capital, saying:

"Peace be within thy walls,
And prosperity within thy palaces"
(Ps. 122:7).

The palace of Jerusalem to which several references are made in the Bible, was part of a complex of buildings surrounding a court, as the lowly rooms of the usual Mediterranean home surrounded their open court, leaving blank and unrevealing walls to the street. In fact, the phrase, "the palace of king's house," is what we usually designate as the palace proper. To have this invaded by the king of Babylon, or to have its masonry threatened, its walls "dissolved" (Nah. 2:6), its furnishings burned, its treasures robbed as Amos prophesied they would be because of Judah's neglect of the laws of God—this summed up the fear of national defeat which haunted every Jew at Jerusalem and Samaria. The population

dreaded the approach of a Nebuchadnezzar, lest their sovereign's palace be leveled and thorns come up on marble floors worn smooth with the tread of peaceful citizens and the dance of happy feet.

At palaces official communiqués were posted; we read in Amos, "Publish ye in the palaces at Ashdod, and in the palaces in the land of Egypt" (3:9). Palaces were also seething caldrons of violence and tumult boiling up within the population, headquarters of fifth columns, and assembly places of would-be plunderers and propagandists.

In almost every excavated city of Bible lands, palaces or residences of governors, have come to light. Their endurance testifies that the most substantial masonry was expended upon them and the temples. To several palaces we have already referred in Art, Defense, and Archaeology. Those at Samaria, Megiddo, Jerusalem, and Gibeah are notably eloquent, putting us in touch with royal court life of millenniums ago. Fewer of the mud-brick palaces of low-lying Babylonia have survived.

A Canaanite palace-fort at Gezer of 1400-1000 B.C. has been excavated and has revealed interesting ground plans. Amorite palace-forts have been uncovered at Tanach in the Plain of Esdraelon and on the Plain. Such structures usually contained libraries for the state archives, food-storage chambers, resourceful water supplies, and everything to make the ruler's residence a self-contained unit. The extensive Persian palace, the foundations of whose rooms we have enjoyed tracing at Lachish, are "a connecting link between the Persepolis palaces and Parthian Dura" on the Euphrates, says Albright. This Persian residency was 70 yds. long and crowned the Lachish acropolis of the seventh century B.C. Some letters of the Hebrew alphabet were scratched on one of its steps, perhaps by a Lachish school-boy.

JUDAEAN PALACES

As we have already indicated, the rustic castle of the first Hebrew king, Saul, has been excavated at Gibeah.

The first palace of David was at Hebron,

where he ruled seven years. It was probably just a massive stone house, like his neighbors' homes in this rich farm country. After his siege of Jebusite Jerusalem he prepared something better at Millo, the southeast corner of the plateau on which the Jebusite city stood when he captured it, and on which Jerusalem later grew up. After he took "the stronghold of Zion," he interviewed messengers from Hiram of Tyre, who sent "cedar trees, and carpenters, and masons; and they built David a house" (II Sam. 5:11). Nothing of this survives today, but its site must be within the sliding-down-the-hill portion of old Jerusalem outside the walls, known as the "City of David." We may be sure that David's palace was not extravagant or ornate. The warrior-king had little time for art other than music. Yet we have a glimpse of its fragrant woodwork in his own words: "I dwell in a house of cedar, but the ark of God dwelleth within curtains" (II Sam. 7:2). It was like other tenth-century Palestinian houses, with courts and flat roofs, as we glimpse from Samuel's account of the Bath-sheba incident: "David arose from off his bed, and walked upon the roof of the king's house" (11:2). Probably the walls of this palace displayed much of the rich booty of gold shields and "exceeding much brass, [copper]" which David captured from citizens of Syria, Philistia, and Moab (II Sam. 8). We know that when one of the successors of David, King Asa of Judah, wanted to strengthen his alliance with Benhadad of Damascus, he sent a present of silver and gold which had been "treasures of the king's house." We wonder whether these were consumed with the fire which Amos prophesied would devour the palace of Benhadad (Amos 1:4).

The site of Solomon's palace is thought to be near that occupied today by the Mosque El Aksa, once a Crusader basilica in the Temple Area, south of the Temple and its rocky altar. We gain some sense of its noble setting when we look at the medieval arcades of the lovely worship place.

One reminder of the cedar-trimmed palace persists today in a cedar-wood prayer place in the Mosque, inlaid with ivory

and mother-of-pearl. Reference has already been made to the palace Solomon built for his Egyptian wife.

The site of Herod's own palace in his new city of marble is thought to be the present Citadel of Jerusalem. The square David's Tower is believed to be the descendant of the Hippicus, one of the three magnificent towers which guarded the elaborate palace of Herod at the time of Christ's birth. Some of the lower courses of masonry in David's Tower were doubtless seen by Jesus many times as he walked through the city.

Worshipful Hebrews who composed the Psalms were surrounded by palaces and travelers' descriptions of faraway royal residences; yet they declared, "God hath made himself known in Zion's palaces for a refuge," to the dismay of kings who passed by. They were interested in the throne of Jehovah, his scepter, and his ivory palaces out of which came music of stringed instruments (Psalm 45).

The palatial new Government House of the British administration of Palestine today is a gleaming white structure on a hill visible from the site of David's little city at Millo. It is reached by turning left on the Bethlehem Road near Jerusalem railway station.

Today the head of the Roman Church has his vast Vatican Palace surrounded by gardens and enriched by great collections of art and precious manuscripts. Near by are offices for administering his worldwide religious hierarchy, and the world's largest basilica, St. Peter's, serves as "chapel" for the Vatican city complex. Similarly, high priests at Jerusalem in Bible times had their rambling palaces. These centers were like the regal residences of medieval popes at French Avignon. There are five references in the New Testament to the "palace of the high priest." In the court of the palace of Caiaphas the high priest gathered the "chief priests, and the elders of the people . . . and they took counsel together that they might take Jesus by subtlety, and kill him" (Matt. 26:4). And to this same palace Jesus himself was led for trial before that priestly group. In its clammy courtyard, warmed by a brazier of glowing coals, Peter pronounced his sordid denials of his

Master, declaring that he had never known the Galilean (Matt. 26).

Many believe that the palace of Caiaphas stood not far from the present Zion Gate, near what we are today shown as the Tomb of David and the Cenaculum, or upper room where the last supper of Christ with his faithful disciples was conducted.

ISRAEL'S HILLTOP PALACES AT SAMARIA

The substantial masonry of the stone palaces of the ninth-century kings, Omri and Ahab, appears to all beholders. For details of these and of Herod's palace at Sebastieh, consult reports of Reisner's excavations at Samaria.

LABYRINTHS OF CRETAN PALACES

Islanders of Crete built at Knossos a series of palaces whose labyrinthine passages Sir Arthur Evans ably excavated, laying bare one of the marvels of ancient Mediterranean times. The "new" palace of 1600-1400 B.C., erected while Israel was still in Egypt, marked the beginning of what James H. Breasted called "real architecture" in the northern Mediterranean. After the manner of Egyptian palaces, its passageways were painted with lively scenes. It had a grand stairway with five flights of easy steps which lent themselves to court pageantry; upper porticoes for cool breezes; a sanitary equipment including a bathroom and a latrine; a palace laundry whose basin caught water from near-by falls; a nursery room; and a private theatre. The colorful apartment of the queen was paneled with fine wood frescoes and reliefs and furnished with comfortable seats and happy pottery accessories from this Middle Minoan III era.

EGYPTIAN PALACES

We have learned many details of Egyptian palaces through tomb reliefs and other forms of art. (See Art and Nutrition.) Charles Breasted, in *A Pioneer to the Past*, tells of his father's buying furniture from the palace of Menes, used 5,300 years ago.

Illustration 211 gives an idea of how the throne room looked in the Memphis palace of Merenptah, son of Ramesses II, "greatest of Egyptian boasters" who was probably the pharaoh of the Exodus (c.1299-1232 B.C.). As we look at this comfortable interior (reconstructed imaginatively), we remember that it housed one who raided Israel (c.1232 B.C.) and met for the first time peoples from southeastern Europe.

The palace of Merenptah is described in *Journals of the University Museum at Philadelphia*, by C. S. Fisher, Volumes 12 and 15. The walls were found standing to a height of 4 or 5 ft., some of them having the original painted stucco still in place. Doorsills and portions of frames were in situ. Several lintels lay where they had fallen after the fire which destroyed the palace. The king's dais (illus. 211) was complete, even to steps approaching it. Enough of the floor remained to tell us that it had been of bricks on sand. Walls were brick; the roof, wood. This throne room clearly had been a vast central hall at the end of a colonnaded court. It was entered through a giant vestibule. The room had had six columns of white limestone 26 ft. high. Capitals and base of the columns were decorated with blue and gold petals. The cartouche of Merenptah appeared on bronze door fastenings. Fisher observes that no nation but Egypt could have set its ruler in an atmosphere of such splendid beauty and dignity in 1232 B.C. Albright, in *From the Stone Age to Christianity*, refers to the "Stele of Merenptah," indicating that Israel is already in western Palestine and that Egypt is trying to check its advance.

The vast residence of Amenhotep III at Thebes on the west bank of the Nile opposite Deir el-Bahri has been excavated by the Metropolitan Museum of Art, whose *Bulletins* are available (1916-18).

One of the most interesting palaces in Egypt was that of Akhenaton at his new City of the Horizon, Amarna. From a bridge, entrance was made over a ramp into the garden gay with flowers. The king's house, called the "Castle of Aton," occupied about one-fourth of an area almost 500 yds. each way. It had, as would be

expected of the palace of "the world's first monotheist," an elaborate series of temples and courts leading to the main sanctuary at the rear beyond a sacred lake with extensive temple storage magazines. The palace proper had the famous Window of Appearance, where the king, queen, and their daughters passed out gifts of food to the people below.

All around the palace of young Akhenaton (Amenhotep IV, 1387-1366 B.C.) ran a double wall, with fortified passages. The main room of the palace had huge piers running up, trellised for grapevines. Pious Queen Nofretete had her own pavilion, in an open court with a well, welcome in this hot Egyptian climate. And, also, at a distance from the king's palace, Nofretete had her own palace, as Moorish queens at the Alhambra in Granada had their miradors.

Akhenaton's royal residence also had its priests' quarters convenient to the Chapel of Aton; servants' sections; and craftsmen's courtyard.

PALACES "BEYOND THE RIVER"

A graphic picture of life in a royal establishment of Persia is set down by the author of the Book of Esther, who tells of "those days, when the king Ahasuerus sat on the throne of his kingdom, which was in Shushan the palace" (Esther 1:2). This same Susa castle appears in the stories of Nehemiah, who refers to a certain year when he was "in Shushan the palace," serving as cupbearer to Artaxerxes the King during the Babylonian Captivity of his people; and in the record of Daniel, who tells of prospering in the reigns of Darius and of Cyrus, and of receiving a vision during the rule of Belshazzar, "when I was in Shushan the palace" (Dan. 8:2). The French began excavation of Susa but left much unexplored. The site is worthy of an elaborate investigation.

The palaces of this Achaemenid line of Persian rulers have been laid before our very eyes by the spades of archaeologists excavating and identifying their vastness. The great palace at Persepolis, whose famous ceremonial staircase is shown in illustration 210, gives us a glimpse of the

vast scale of this extravagant center of rule and ruin for neighbor nations. For details, consult pamphlet, *Persepolis*, by Erich Schmidt, University of Chicago Press, 1938. Note in the accompanying picture the sculptures running the entire length of the stairway, depicting a New Year festival of the Persian emperors. On the right, guards stand at attention. Spectators from Media and Persia bring up the rear. The fluted columns in the background are all that remain from a perfect forest of columns which once supported the roof of this Royal Audience Hall of the Persepolis palace.

Millar Burrows in his *What Mean These Stones?* tells of a palace excavated at Bronze Age Mari on the Euphrates, having more than 100 rooms, many bath-rooms, and several schoolrooms for youth.

The palace platform at Nineveh covered twenty-five acres, now largely waving grain fields. Babylon is a dizzying maze of palaces, including Assyrian structures on Festival Street and, thirty feet above, the level of Nebuchadnezzar's palaces built after Sennacherib had ruined Babylon to the point of turning a canal over its site. Nebuchadnezzar, in the period when Jews were captives in his city (after 586 B.C.), crowned his fabulous palace structures with the Hanging Gardens (illus. 237). Arches, believed to be part of Belshazzar's palace on whose walls the handwriting of Dan. 5 appeared, have come to light.

Some authorities believe that Prince Belshazzar of the Daniel story was burned in his own palace at the onrush of Cyrus in the sixth century B.C.

Of Nebuchadnezzar's palace at Babylon, Rawlinson began the excavation as long ago as 1854. Palaces of Sargon at Khorsabad and of Sennacherib at Nineveh ("on a grander scale than any") have been excavated. At Khorsabad, site of the northernmost palace of the Assyrian King Sargon II (c.722 B.C.), the Oriental Institute has made elaborate excavations.

PRISONS

Pages of the Bible reveal more prisons than schools—a sorry situation in any age or land. And there were many varieties.

Of the rock-cut type, beneath the level of the city, was the damp cell of Paul in the Mamertine at Rome, adjacent to the famous Cloaca Maxima. Today its dripping walls beneath the church seen in illustration 215 suggest the reason for Paul's writing Timothy to bring his cloak before the winter's penetrating cold in an unheated stone cell near the Tiber proved fatal. A rock-hewn prison cell, the so-called Prison of Socrates at Athens, had actually been the several chambers of an archaic home. Yet even this, for a mind like the great philosopher's, with the glory of a Parthenon to look out upon, proves Richard Lovelace's words:

Stone walls do not a prison make,
Nor iron bars, a cage.
Minds innocent and quiet take
That for an hermitage.

Paul was able from his dungeon in the rock caverns of Rome to write triumphantly of an accomplished Christian mission encircling the eastern Mediterranean. And Socrates sent from his cell such philosophical admonitions as "Know thyself."

Many castles, fortresses, and palaces of Palestine contained prisons. We have already mentioned that Jesus knew what it meant to be imprisoned in the court of the high priest and in the "hall called the Praetorium" on the night between his arrest and the afternoon of his crucifixion. He could project himself into the Jerusalem prison hours of such prophets as Jeremiah, who was first shut up in a dungeon-house and then confined by King Zedekiah in "the court of the guard," where he was rationed daily a "loaf of bread out of the bakers' street, until all the bread in the city was spent" (Jer. 37:16-21). But when Jeremiah prophesied the coming doom of the city, he was tied with cords and again let down into a dungeon (cistern?). On intercession of an Ethiopian, the prophet was again drawn up from the wet pit and placed in the court of the guard, where he remained until the fall of Jerusalem. The imprisonment of the prophet affected Palestinian tradition so deeply that even today a natural cavern between Solomon's Quarries and Gordon's Calvary is called "The

Grotto of Jeremiah—where he wrote the book of Jeremiah." We have walked in this grotto and pondered its gloomy atmosphere on a sunlit day in Jerusalem.

In early Old Testament times, prisons were conspicuous. Joseph, after the trumped-up charge concerning Potiphar's wife, was dropped into a well-like dungeon, the like of which was pointed out to us in old Cairo. But he dramatically emerged to become second only to Pharaoh himself, after he had interpreted dreams for his prison mates, the butler and the baker of the king, and later for the ruler of Egypt. Genesis 39 describes Joseph's prison, where he was a "trustee" in charge of other prisoners, as a "ward in the house of the captain of the guard." Samson was incarcerated during the period of the judges in a Gaza prison house and forced to labor at grinding grain (Judg. 16:21). Even a king of Israel—Hoshea—was in prison at Samaria because of his conspiracy and refusal to pay tribute annually to the King of Assyria (II Kings 17:4). Zedekiah, King of Judah, after he had his eyes put out by Nebuchadnezzar, was incarcerated in a Babylonian prison, damp, indeed, in that low river country. But a better fate came to the young prisoner-king Jehoiachin, who was released from his cell by king Evil-merodach of Babylon; he was allowed to put on fresh clothes and to take a prominent throne "above the throne of the kings that were with him in Babylon" (Jer. 52:33). Moreover, the fact that he was given an allowance of food continually was recently confirmed by epigraphic material found outside the Bible.

The prison in which John the Baptist was confined at the beginning of Christ's public ministry may have been the formidable Machaerus fortress. Standing on weird heights in Moab above the eastern shore of the Dead Sea, it was reconstructed by Herod Antipas, son of Herod the Great. Even today, with better Transjordan roads, this site on a lonely, cone-shaped hill is inaccessible. Not far away is another elevation where Herod had an immense palace, baths, storehouses, and arsenal; it is possible that here Salome danced before Herod Antipas and requested the head of John the Baptist. Matthew tells

how John was beheaded "in the prison" (14:10).

Peter knew the feel of damp Palestinian prisons. When he and his helpers were healing and teaching in Jerusalem, adding to the new Christian sect hundreds who had come from distant towns, jealous priests had them put in the "public ward," or the common city prison. The story of their miraculous release, to teach again in the Temple where their Master had taught, is told in Acts 5.

On another occasion, Peter was thrown into a Jerusalem prison with four quaternions of soldiers to guard him (Acts 12). But while Peter was in his cell, the infant Christian Church was praying for his release. On the very night when Herod was intending to bring him before the people, an angel loosened his chains, and he slipped through the quiet streets of Jerusalem without waking his guards; then he turned up suddenly at the home of Mary, mother of Mark. No wonder Herod put the guards to death, made a journey down to the new city of Caesarea, "and tarried there" on the coast of the Mediterranean. Such supernatural events were enough to make him jittery.

Time has cast a glory around the prison cells of early Christian leaders. These incarcerations were not without their benefits to the victims. No doubt Paul in the Mamertine remembered to his sorrow occasions when he had "shut up many of the saints in prisons" before his conversion to Christ's way of life. He confessed this sin before King Agrippa at Caesarea (Acts 26:10). And he recalled his former prison experiences which had been sweetened by the companionship of his fellow-worker, Silas, at Philippi. Because they had interfered with the trade of a soothsaying maiden, they were cast "into the inner prison," and their feet made fast in stocks, after they had been beaten with many stripes. "But about midnight Paul and Silas were praying and singing hymns unto God, and the prisoners were listening to them; and suddenly there was a great earthquake, so that the foundations of the prisonhouse were shaken; and immediately all the doors were opened and everyone's bands were loosed" (Acts 16:25-26).

Some beneficent power ultimately released Paul from the Mamertine; he did not meet his death there but at a point outside the city called "The Three Fountains." His traditional burial place is now beautified by the Basilica of St. Paul's without the Walls, where a statue of the Apostle stands with the uplifted sword of his Christian faith.

Peter, also, was incarcerated in the Roman Mamertine, where tradition says, he baptized his jailers.

ROSTRUM AND BEMA

In the absence of newspapers and radio, ancient peoples were kept informed of public events by able orators and heralds. The Roman Forum today still proudly preserves the Rostrum from which such able speakers as Cicero and Julius Caesar declaimed (illus. 20). The Bema of Athens was a square-cut rock platform on the little hill, the Pnyx, just west of the Acropolis. This was the scene of early Greek worship of Zeus. The stepped elevation may have been a primitive altar, as other cubical altars appear in this vicinity. But surely it was the orators' Bema in the important fifth century B.C. We believe that from this elevation above the ecclesia, or citizens' assembly, Pericles, looking to his new construction of temples on the opposite Acropolis, defended his expensive building program, which time has amply justified. The Pnyx, the adjacent Hill of the Muses, and the area near the Monument of Philopappos represent an archaic Greek settlement of rock-cut homes, cisterns, terraces, and steps. Illus. 218.

SCHOOLS

Until synagogues were built in Palestine, after the Exile, schools in the average town consisted of teachers surrounded by pupils, walking about in the open air. The slave or pedagogue escorted the rich man's son as his teacher and carried his lyre for him. Socrates and his learners frequented the area between the Dipylon Gate and the Kerameikos of Athens; and thus taught Gamaliel at whose feet in Jerusalem, Paul and many other rabbinical

students learned profound truths. In Egyptian and Palestinian streets today we hear the droning voices of children at school, memorizing the Koran or the laws of the Hebrews. On Jerusalem's Via Dolorosa we have met lines of Hebrew children on their way to school.

Jesus as teacher not only used mountain side and lake as his schoolroom for God but entered into the synagogues at Nazareth, Capernaum, and other towns he visited. As Matthew relates, "Jesus went about in all Galilee, teaching in their synagogues" (4:23) and "These things said he in the synagogue, as he taught in Capernaum" (John 6:59). The record of Mark 6:2 was the customary program of the Teacher: "when the sabbath was come, he began to teach in the synagogue" (6:2). His schoolroom experience deepened constantly his own divine qualities, so that even a ruler of the Pharisees named Nicodemus, himself a teacher of Israel, came one night, placing himself at the feet of the Man from peasant Nazareth and declaring, "Rabbi, we know that thou art a teacher come from God" (John 3:2).

Paul, Peter, and their colleagues—Silas, Barnabas, Timothy, Luke, and early church fathers—used the open spaces of Palestine and the northeast angle of the Mediterranean world as their classrooms for Christian instruction. But Paul drew the line at women teachers: "I permit not a woman to teach" (1 Tim. 2:12).

The necessity of being schooled in the doctrines of the new Christian faith appears in such experiences as that of the Ethiopian eunuch of Queen Candace (Acts 8). Returning by chariot from Jerusalem to Ethiopia, he was overtaken by Philip, the Christian evangelist, who noticed the swarthy man sitting reading the Book of Isaiah as he jogged along. Asking if the reader understood what he was perusing, Philip drew from the eunuch the challenge, "How can I, except someone guide me?" Climbing up, Philip turned the chariot into a schoolroom along the dusty road to Gaza, as he interpreted Isa. 53:7f. We who have traveled this lonely desert stretch to Gaza from Jerusalem by way of Beer-sheba know how little distraction from the lesson there was

that day when the eunuch went to school to the evangelist.

After the Exile, Levites instructed pious Jewish families in the ritual of worship for Temple and synagogue. Children were taught by their elders the great historic events of their faith. They were also sent to synagogue schools, as they are today in Palestine. Excellent public schools for Arabs and Jews are maintained now by the government of Palestine. Bethlehem is noted for large schools conducted by Christian church organizations.

In Rome and Athens, highly educated slaves or pedagogues were retained by families for the education of their sons and daughters. Sons later attended universities, especially at Alexandria.

SOCIAL GAMES, TOYS, SPORTS

Soldiers of Bethlehem playing chess in Manger Square today reveal a taste which goes back to the earliest records we have of life in Bible lands. Note the picture of the lovely Sumerian game-board in illustration 221, found by Woolley at Ur of the Chaldees and dating from before 3000 B.C. Numerous gaming-boards from the Eighteenth Egyptian Dynasty are in the Cairo Museum, and dice from nearly every country of the ancient East have turned up, in ivory, pottery, and many other materials.

A gaming-board with men of clay, from Egypt of c.5000 B.C., has been recovered. Also, in a child's grave of this same period, has been found a game of skittles; through a gate made with three wooden blocks at one end of the board balls were rolled to knock over cone-shaped men. In the University Museum at Philadelphia we have seen an ivory and pink alabaster draught board from Egyptian Abydos of c.3000-2800 B.C. Instead of dice, the players tossed ivory strips, with one side painted black. In this same place we noticed a predynastic game of white marbles, used to topple over pylons 1½ in. high. Marbles seem to have been popular in the golden Eighteenth Egyptian Dynasty. Burrows in *What Mean These Stones?* tells of a Cretan gaming-board of a certain king, which defies description. A "blaze of silver, gold, ivory, and crystal"

makes up the board and the chessmen. The board is more than 1 yd. long and its ivory framework is covered with gold plate, trimmed with mosaic of rock crystal and blue enamel paste. Around its rim runs a lovely border of marguerites, whose centers were crystal, probably set in blue enamel paste. At the top of the board are four nautilus shells, eloquent of the seafaring Minoan islanders.

Even vigorous Hyksos horsemen who invaded Egypt played at draughts while resting from conquests. We know that they had a square ivory game-board and used two spoollike truncated pyramiddice. These had only four numerals, as was also the case in Palestine.

The casting of the pur, or lots, in the palace of King Ahasuerus where Queen Esther was in favor at Shushan gave the name "Purim" to the Hebrew festival immortalizing her patriotic service to her people at the court of this Xerxes.

But the most eloquent gaming-board which has yet come to light in Bible lands is scratched on a portion of Roman pavement at Herod's Praetorium in Jerusalem. Students have figured out the sort of plays used on this gaming-board. It has stirred us as have few Roman relics in Palestine, for it brings us close to the tragedy of Christ.

At Tell Beit Mirsim (Kirjath-sepher) in Palestine, a palace ruin has yielded a complete set of gaming pieces: five small three-cornered pyramids and five little cones of pottery, with ivory dice.

Toys surviving from Bible times indicate that ancient people were interested in the pleasures of their children. Both games and toys of plastic materials have been found in the Egyptian levels of the Stone Age. By the Early Iron Age (thirteenth or twelfth century B.C.) little models of houses, animals, and scenes from everyday life were used as children's toys. Poor boys and girls were needed for farm tasks. But children of the well-to-do had dolls with movable joints and hair of strung beads or strings of mud. At Tell Beit Mirsim in Palestine, Hebrew toys dating from c.900-600 B.C. have come to light; these small dolls, whistles, and rattles have not a cultic but an amusement significance. In the Athenian Agora, or

market place, a baby's terra-cotta rattle shaped like a dove has turned up from the Roman era; the pebble within made a pleasing noise when the toy was shaken by its handle. A small dog, from the sixth century B.C., with a hole in its nose for a lead-string, is just such a toy as we see among children in parks today.

Little social groups in Egypt of Bible times organized hunting parties for the reedy marshes, where they bagged vultures, falcons, buzzards, kites, and crows. Some of their wooden boomerangs, or curved sticks, we have seen among King Tut-ankh-amun's treasures in the Museum at Cairo. Fishing spears, bronze fish-hooks, and harpoons for attacking hippopotamuses in papyrus thickets have also survived. But most Egyptian fishing was done with nets, as in Palestine (illus. 188).

TEMPLES

The large groups of buildings in temple precincts were the most important social structures of every community in Bible lands, whether these temples were dedicated to Jehovah, or to Canaanite Baalim, or the moon-god of Babylon. As we have indicated in *Business Transactions*, they included mints; houses for public records of loans and land purchases; shrines to favorite deities; residences for temple staffs including priests and priestesses, musicians, scribes, and collectors of temple taxes. We have already made numerous references to temples at Jerash, Lachish, Jerusalem, Samaria, and elsewhere. To others we shall refer in our discussion of *Worship*. Often temples were adjacent to other structures: the small Temple of Isis is near the large theatre of Pompeii; at Ostia the Temple of Augustus is adjacent to the forum; the temples of Apollo and of Jupiter in Pompeii soar above the market place; and the archaic Temple of Apollo at Corinth towers over the maze of shops, now excavated (illus. 84). In the Forum Romanum, where orations were uttered that made and marred careers of men and empires, temples were so numerous that they actually cluttered the landscape with elegance of columns—temples to Saturn, Castor and Pollux, Julius

Caesar, Vesta, Augustus, Constantine, and Antoninus (illus. 81).

In no city of the ancient world did a temple area cover so large a part of the city's area as at Jerusalem. There the place of the noble sanctuary occupied about one-fourth the enclosed space of the capital (illus. 166).

For Solomon's Temple, see pages 94-5 and illustration 60.

Herod, as Josephus relates, had had such a peaceful reign as king of Judaea (died in 4 B.C.) that he felt in the mood for enlarging and rebuilding the Temple which had been repaired after the return from the Babylonian Exile. At first the citizens were nervous lest he tear down what they already had, without sincere intention of building a better structure. So Herod gathered together "a thousand wagons," says Josephus, and ten thousand skilled workmen; he accumulated a thousand priestly garments and taught many of the priests how to do stone work and carpentry. Then he tactfully had the old foundations taken away and began construction in earnest. When Herod's Temple was completed after about 80 years, it was of dazzling beauty, for "its stones were white and strong, and each of their lengths was twenty-five cubits." The royal cloisters attracted much attention; their center was so high that people in the suburbs, on the Mount of Olives, and those approaching from the east had a thrilling perspective. Josephus tells in detail how Herod enlarged space for his acropolis, even as at Athens, Greeks had built retaining walls to shore up an extra building area. Herod so managed that the date of completion coincided with his own anniversary of accession; a gala feast was held at which the king "sacrificed three hundred oxen to God, as did the rest—every one according to his ability." The Tower of Antonia, north of the Temple Area, Herod dedicated to his friend, the Roman ruler. In this tower he arranged for the valuable priestly garments to be stored. From it the Jewish priests could remove them only by consent of Herod's captain of the Temple guards, to whom the priests showed their official seal. This was quite a whip over the heads of the Jews to prevent disorders.

For other temples, see Index.

THEATRES

IN PALESTINE AND TRANSJORDAN

Theatres were a part of every typical Graeco-Roman city visited by Jesus and Paul. Yet we have no word either of condemnation or approval from the Master concerning them. The nearest approach is his references to the hypocrite. This word for the insincere pretender or, literally, actor comes from the Greek *hypokrites*, a man who gives himself out to be what he knows he ought to be but has no intention of becoming, or a man acting a part or wearing a mask.

Decorative stone masks appear in illustration 220 showing the restored theatre at Italian Ostia. The type of mask worn by actors indicated whether the mood was tragic or comic.

However, Jesus must have seen the theatre built by Roman rulers at Sepphoris near Nazareth, that of Herod at Sebastieh in the Samaritan mountains, and those in the magnificent cities he visited east of the Jordan. At Jerusalem, Herod built two theatres, one apparently in the city, another outside "in the plain"—probably a sports amphitheatre. The latter type was always situated at a slight distance from the city because of the spacious provisions for animals, spectators, gladiators, chariots, and other paraphernalia. This location on the city's edge we have noted at Corinth, Transjordanian Jerash, Pompeii, and Rome.

Doubtless Jesus shared the antipathy of all devout Jews at Jerusalem for the western pagan innovations of Herod's extravagant social structures. Their dazzling beauty drew from Christ's naïve disciples of Galilee such exclamations as "What manner of stones and what manner of building!" (Mark 13:2) Jews once raised a revolt against Herod because of their unwanted theatres in which they thought they saw idols hanging, contrary to their own law. Not until they were taken into the theatre, says Josephus, and shown that these were trophies of covered wood, not objects of worship, were they quieted.

The celebration of every fifth year of Caesar's regime with solemn games was an offense against the laws of Judaea.

Wrestlers from every land were attracted by huge prizes; gay chariots drawn by as many as four pairs of horses brought thrills to the cosmopolitan crowd at Jerusalem but never to pious sons of Abraham native to that country. Fights between lions, and between lions and gladiators, were staged at Jerusalem as at Rome and Puteoli.

Herod constructed at Caesarea, too, a theatre and an amphitheatre, which delighted the mariners who put in at that new port. On the occasion of the 192nd Olympiad, he offered huge prizes not only to the winner but also to the runners-up. "Caesar's Games" were played in the arena every fifth year. Nelson Glueck, in *The Other Side of the Jordan*, tells of a copper-mining center deluxe which had its own hillside theatre. He photographed many seats still in place. The camp, at es-Sabrah, was a Nabataean copper-mining and -smelting works, about seven kilometers southwest of Petra. It flourished in the first and second centuries before and after Christ. When Romans took it over from Nabataeans, they were delighted to improve the rock-cut theatre for use in their off-duty hours at the mines. We recall seeing a hillside theatre just off the road by which we drove from the Greek mining center at Laurion between Cape Sunium and Marathon in Attica. Bread was no more essential to contented laborers than circuses, then as now. Jerash in Transjordan had three theatres. One of the largest and best preserved in this little country is at Amman (ancient Philadelphia). It was just outside our hotel window in this Arab capital of the Emir Abdullah.

ELSEWHERE IN THE GRAECO-ROMAN WORLD

Paul, traveling over many of the main roads of his Graeco-Roman world in the first Christian century, had occasion to see its theatres. One of the many tumults which centered about him occurred in the theatre of Ephesus, remains of which persist today. Because of the eloquence with which he preached Christ, he was accused by silver merchants of interfering with their sale of figurines of Diana, whose famous temple was in that city. The mob,

rushing into the theatre, seized Paul's companions, Gaius and Aristarchus, from Macedonia. "And certain of the Asiarchs, officers in charge of festivals in the Roman province of Asia, besought him not to adventure himself into the theatre." This narration of Acts 19 climaxed with the dismissal of the assembly by the town clerk, who urged them to do nothing rash but to take their case, if they had a real one, to the open courts or to the proconsul. This is a good example of how theatres were used not only for dramas, dances, music, and games, but as public assembly places where opinions were expressed. Votes were often taken there, on clay fragments, or ostraca.

Paul no doubt saw many a theatre like the three we still see in excavated Pompeii. One amphitheatre is in the fields at the foot of Vesuvius outside the once prosperous town of Paul's day. Of the two within the city, one is a large theatre whose banked-up seats are comfortable; adjacent is a small Odeon, a place specializing in music, as the great Odeon at Athens adjoined the noted Theatre of Dionysos at the foot of the Acropolis. An eloquent view of the worn doorstep leading into the theatre area of pleasure-loving first-century Pompeians shows a copious fountain basin convenient for thirsty patrons. This theatre area suffered from bombing in 1943.

Paul saw at Rome and in such towns as his port of Puteoli huge amphitheatres where games were played. Some of these were equipped with "naval sets" for staging water scenes in carnivals (illus. 219). The number of lions, elephants, bears, bulls, horses, and men that participated in Roman gladiatorial and arena shows staggers the imagination. The animals were caged underground and were often forced up into the amphitheatre by fires started in the passageways behind them. Some arenas had rising floors which elevated the animals. Illustration 216 shows the Colosseum at Rome, begun by Vespasian (A.D. 69-79). It was the scene of repeated martyrdoms of Christians tossed to ravenous beasts. To the memory of these heroic early Christians, a modern cross has been erected near the site of the infamous Golden House of Nero.

To Greece we are indebted for the first drama theatre, that of Dionysos at the foot of the sacred Acropolis hill in Athens (illus. 217). There developed from the goat songs, dances, and rites in honor of the god of grapes, Bacchus, the first acts in the world's repertoire of drama. Paul saw the fan-shaped hillside theatre at Athens, just east of the Odeon, a music hall (illus. 100) first built by Pericles as a rectangular hypostyle hall of columns. The Apostle was familiar with the small theatre or Odeon at Corinth. He knew, too, the larger theatre at a distance from the teeming city, where Leslie Shear and his American colleagues found the amazing inscription east of the stage building, stating that "Erastus, procurator, acdile, laid the pavement at his own expense." Archaeological evidence dates this paving from the middle of the first century A.D., and it is possible that this wealthy Roman procurator was the Erastus, friend of Paul (Rom. 16:23), who was "treasurer of the city" and sent salutations to Roman Christians. The discoveries made by Americans at the Corinth theatre are rich and too detailed to describe in this place. Reports of the American Schools of Classical Studies are available.

The Stadium of modern Athens, a gleaming white marble structure of seats surrounding the vast oval space where races, games, and festivals were held before World War II, is on the site of the ancient stadium of Paul's time. We witnessed one of its happiest afternoons, during the festival of Greek towns held there in 1938 to celebrate the second anniversary of the Metaxas regime. Lovely peasant dances were conducted with ancient costumes and old musical instruments. Offerings in the form of sea unctions, fancy cakes, and sheaves of grain were presented before the government box as they were in classic times. To have witnessed that hour before the woe that came to prosperous Athens in 1939 was a rare privilege.

Not from the Graeco-Roman age come the earliest theatres of Bible lands. Evans found in Minoan Crete a small theatre for wrestling matches, near the palace of Minos at Knossos.

For illuminating material on the Greek Theatre, see the *National Geographic*

Magazine, March 1944, text; and pictures by H. M. Herget. This presentation makes clear the skene and the narrow logeion platform, with the proskenion above it, where the action of the drama took place.

TREASURIES

In Bible times treasuries were public buildings where precious metal objects, archives of clay tablets of papyrus sheets, and taxes of oil, grain, animals, and money were stored.

THE KING'S TREASURY

The treasury was often adjacent to the king's palace. At Samaria, Ahab seems to have extended his court precincts to accommodate the huge revenues brought in from subject territory. The blackened soil near Ahab's treasury suggests that oil was stored here. In his Ostraca House were kept pottery fragments recording arrivals of tax payments in produce. This structure has been found at the south end of the great court of Ahab's Samaria. The revenue officials and also an armed guard lived at the treasury. Jeroboam II (c.750 B.C.) enlarged still more the vast treasury of Ahab. Portions of its chambers have been excavated. Similar structures have been found at Megiddo and at Lachish; all such strongholds were natural repositories of revenues.

The Hebrew people helped build store cities or treasuries at Pithom and Raamses where the income in tithes of animals and foods was hoarded (Ex. 1:11). They were familiar, too, during the Exile, with the King's Treasure House at Babylon. This included a department of records kept with such accuracy that Darius was able to locate there the decree of his father Cyrus, granting captive Jews permission to return to Jerusalem to rebuild their place of worship (Ezra 6:1). This was a step in the evolution of the royal libraries.

In another sense, the "king's treasury" meant the place where he safeguarded his treasures of gold and silver, *objets d'art*, and sacred vessels, often stripped from sanctuaries of rivals.

In a narrower sense, the word "treasury" meant what we understand today when we

refer to the place where public funds are kept. Nehemiah, the governor of Jerusalem, reorganizing affairs after the Exile, paid into the treasury a thousand gold darics and fifty basins, besides hundreds of priests' garments. He also set up a priest, a scribe, and Levites as treasurers to preside over tithes of "grain and the new wine and the oil," paid by all Judah. He had observed the careful business methods of Artaxerxes the King at Babylon and was equipped to institute fiscal reforms at home on his return.

TEMPLE TREASURIES

In earliest Bible times, temple complexes included vast treasuries where were kept archives of loans and gifts, and bullion for coinage which temples minted. There were also rooms where tithes, taxes, and gifts were stored. This was true in ancient Babylon and in Egypt and Syria. Many temples of gods were the most capitalistic centers of the ancient world. King and priest worked hand in hand. It was therefore natural that Israel, evolving its system of worship and political organization following the period of the judges, should imitate its neighbors. As early as the era of Joshua, "the silver, and gold, and vessels of copper and iron" captured at the siege of Jericho, which was ever rich in the wealth of Egypt, were dedicated to Jehovah and assigned to his treasury (Josh. 6:19) in the Tabernacle.

When David turned over to Solomon the pattern for the civic center he envisioned on the Jerusalem acropolis which he had secured from the Jebusites, he included the plan of "the treasuries thereof, and of the upper rooms thereof" (I Chron. 28:11). These "treasuries of God" increased in importance through centuries of worship at the Jerusalem Temple. Hezekiah, the great civic leader who safeguarded the precious water supply, saw to it that he had "treasuries for silver, and for gold, and for precious stones, and for spices, and for shields, and for all manner of goodly vessels; storehouses also for the increase of grain and new wine and oil; and stalls for all manner of beasts, and flocks in folds" (II Chron. 32:27-8).

By the time of Jesus, the new Temple

built at Jerusalem by Herod had a treasury to which every worshiper came for payment of religious tithes. It provided not only cells where sacred treasures were kept but offering boxes placed on each side of the great court leading from the women's court to the men's. Josephus states that there were thirteen such boxes. This is why Jesus, teaching daily in the Temple Area, took his seat "over against the treasury," where he not only could see the mites deposited by the widow and the larger gifts by men of means but could be sure that these citizens heard his teaching, "I am the light of the world." Jesus often protested against laying up of earthly treasures by individuals, for he knew the corrosive influences of such affections. "Lay up for yourselves treasures in heaven, where neither moth nor rust doth consume and where thieves do not break through nor steal: for where thy treasure is, there will thy heart be also" (Matt. 6:19-21). Temple treasurers, scribes, and petty officials all resented this teaching. The utterance helped build up crucifying resentment against Jesus.

The word "treasure" in Bible times also connoted individuals' precious possessions which for safekeeping were either buried in the ground (Matt. 13:44) or carried on their persons. We have seen nomadic desert women today wearing their wealth in bracelets of heavy silver and amber. When the worshipful Wise Men arrived at Bethlehem's manger to adore the newborn infant king, "opening their treasures they offered unto him gifts, gold and frankincense and myrrh" (Matt. 2:11). We wonder what Mary and Joseph did with these treasures from the wealth of rich spice and frankincense merchant seers. Did they finance their flight to Egypt and their refugee days until Joseph resumed his carpentering at Nazareth?

TOMBS

How did people of Bible lands get their first intimations of immortality? Was it through dream experiences, suggesting a world beyond their physical sensibilities? They had a universal, subconscious awareness of what Isaiah had in mind when he said of rulers—and could have said of

many civilians: "All the kings of the nations, all of them, sleep in glory, every one in his own house" (Isa. 14:18).

IN PALESTINE AND TRANSJORDAN

Far back in the Early Stone Age on Mount Carmel, an infant was laid to rest near the cave which was its family's home. It was buried there with a wistful hope of retaining fellowship between the little one and the parents. That baby, excavated not long ago, had on its skull a cap made of bone beads or pendants. Evidently its mother had prepared the child for "an orderly entrance" into the other world.

People in the lands from which our Bible came gave much thought to their spiritual hereafter and to noble provision for their earthly remains. Many believed that a happy future depended upon materials placed in the tomb to minister to that life. Immortality was a prolonged and glorified form of the existence they had experienced on earth. This was especially true of the beliefs among the Sumerians and Egyptians.

Among Hebrews there was a deep sentimental attachment to the family grave. For example, when Nehemiah requested King Artaxerxes to allow him to return from Mesopotamia to Jerusalem, he said he wanted to go to "the city of his father's sepulchres" (Neh. 2:5). If a Jew thought he could be buried in the valley below Zion, he considered his future bliss guaranteed; for in that place the Messiah would judge the faithful. This view is shared today by Moslems whose tombs line the west slope of the Kidron, as Jewish ones line the east. Followers of Mohammed say that on the judgment day the archangel Gabriel will stretch a wire across that valley. All souls able to walk across it will survive. Those who fall will perish in some sort of Gehenna. Joseph the Hebrew, who became a top-ranking official at the court of Pharaoh, was so attached to his ancestral burial plot at Machpelah that when his aged father, Jacob the Patriarch died in Egypt, Joseph asked permission to take his embalmed body to Palestine for burial. Consent was given, Pharaoh even providing an escort of chariots for the mourners (Gen. 50).

NATURAL CAVES

The limestone hills of Palestine, Samaria, Syria, and Transjordan are honey-combed with caves which became not only early homes but natural sepulchres for bodies placed in various sorts of containers and safeguarded often by sealing stones. Sometimes the rock-tomb was given a columned or carved façade, such as the great tombs at Petra had. Again, several chambers were hollowed out in a family's rock-cut burial place. And in many instances individuals made elaborate arrangements for their own burials. This was the case with Joseph of Arimathea, who in his lovely Jerusalem garden had a new tomb "wherein was never man yet laid," until the Saviour was tenderly placed there on Good Friday night (illus. 171). Many poor families provided, in their own vineyards, places of interment.

One of the most famous burial caves of Bible lands is the Cave of Machpelah. Upon Sarah's death, Abraham bought this cave, which was near his well-loved oaks of Mamre, "the field and the cave which was therein, and all the trees that were in the field." Because Ephron the Hittite owner accepted payment for this property, it "was made sure unto Abraham for a possession . . . before all that went in at the gate of the city" (Gen. 23:17). This double cave, now covered by the arch-sacred Moslem mosque, part of which was once a Crusaders' church, has for almost 4,000 years been considered one of the holiest Hebrew sites. This structure is closed even to Christians except by special permission. Cenotaphs covered with embroidered cloths bearing Arabic letters honor Abraham and Sarah, Jacob and Leah. Joseph's cenotaph is south of the mosque near a square minaret, but his actual grave is thought to be somewhere at Shechem. Rachel was buried along the road near Bethlehem, after giving birth to Benjamin. Roadside burials were not infrequent for various reasons. Secluded spots under trees were also favorite interment places. Deborah, Sarah's nurse, was laid under an oak; and Saul and his sons, under terebinth trees by friendly men of Jabesh-gilead (I Chron. 10:12). Many sacred trees are honored in Palestine; witness the

giant cedar planted in the axis of the new Palestine Archaeological Museum by the Moslem Khalidy family from Hebron. Domed white sepulchres of holy Moslem men are usually beside a favorite tree (illus. 229).

Another famous burial cave of Scripture is that of Lazarus, brother of Mary and Martha. It is of the deep rock-cut type, into which we have descended at Bethany for the sake of understanding better John 11: "Jesus therefore, groaning in himself, cometh to the tomb. Now it was a cave, and a stone lay against [or upon] it. . . . And when . . . he cried with a loud voice, Lazarus, come forth. He that was dead came forth, bound hand and foot, with grave-bands."

The most important cave-tomb in Scripture is that of Jesus. We share the belief of Albright and many other scholars that nothing has been yet found to disprove the site of the present Holy Sepulchre Church as his burial place in the garden of Joseph not far from Calvary. This knoll stood just a short distance outside the then existent north city wall. If we can combine the appearance of the Garden Tomb and Gordon's Calvary with the correct location here, we shall approximate the facts, perhaps. We confess to an intuitive sense of convincing reality about the rocky hillock of Golgotha under that darkly impressive church begun by Constantine and Helena in the fourth century A.D. But are repelled by the ornate marble Sepulchre, lighted by too many lamps, under the dome. We turn for a more lucid idea of what Joseph's new garden tomb was like to one which still has a rolling stone to seal its opening, adjacent to the so-called "Tomb of Christ." But what matter where the sepulchre? "He is not here, but is risen" (Luke 24:6).

Even when caves were tomb-chambers, burials were sometimes in huge urns, in which the body was given a position resembling that of the prenatal state. One tiny skeleton has been found curled up in a bowl at Tepe Gawra. Possibly the infant was buried under a building of the fourth millennium B.C. Infant mortality was high in those days when life had no amenities at all and when medicine was not yet surmised. From this same era in Mesopotamia,

two adults were found buried face to face and knee to knee, possibly husband and wife desiring to enter the future life together, as Gordon records in *The Living Past*.

ROCK-CUT TOMBS

Nabataeans of Transjordan fashioned a unique type of tomb when they hollowed out the highland rocks and set in them columned and pedimented façades such as Egyptian and Greek temples had. In fact, the famous Khazneh may be a temple rather than a tomb; its upper and lower porticoes lead into chambers which could have been tombs or storerooms of priests' paraphernalia. At any rate, this structure of the Edomite rock dwellers is unique. It is one of the great sites of Petra, glowing along the dark rocks of its gorgelike approach, with a startling beauty. The Corinthian Tomb, with its four portals and several stories of rock-cut columns, is of great majesty. Nabataeans cherished their burial places, like all people of Bible lands. Tomb inscriptions show that certain owners gave to daughters and their children the right to be buried there.

As we have suggested, the tombs of the kings of Judah have never yet been found despite years of search. Doubtless they are in caves somewhere. A generation ago Macalister thought they might be within Solomon's Quarries. Many believe they must be near the Temple Area. If they are ever excavated—and they may never be, because of superstitions of present occupants of congested Old Jerusalem—they will offer amazing material for archaeologists and will enlighten us about life in Bible lands.

STANDING STRUCTURES

Some conspicuous free-standing structures dominate the eastern Kidron slope. The so-called "Tomb of St. James," whose rock-cut porch has two Doric columns, may date from the first century and may have been seen by Jesus. Such a structure or even the ordinary low, whitewashed mastaba may have suggested to him his famous simile addressed to scribes and Pharisees—"whited sepulchres, which out-

wardly appear beautiful, but inwardly are full of dead men's bones, and of all uncleanness" (Matt. 23:27). The Tomb of Absalom, with its peculiar scent-bottle top, may have nothing more to do with David's wild son than to occupy the site of a pillar set up by him "in the king's dale: for he said, I have no son to keep my name in remembrance; and he called the pillar after his own name; and it is called Absalom's monument unto this day." Do we have here a cultic influence of pillars which had definite meaning to many ancient peoples of the Middle East, or is this simply an allusion to the custom of great men to build their own tomb structures? In illustration 214, see "whited sepulchres" in Kidron Valley.

OSSUARIES

Small stone coffins for bones were widely used in Palestine. When burial chambers in caves or elsewhere became crowded, families removed a decomposed body, placed the bones in an ossuary, and reused the grave. Many ossuaries have been found in Jerusalem, and one bears the name "Yeshua" in Aramaic. This writing indicates how Jesus would have written his autograph.

Professor Sukenik has excavated recently, for the Hebrew Museum's Department of Antiquities at Jerusalem, five closed caves; they contained many ossuaries ornamented with colored inscriptions in Hebrew, Aramaic, and Greek. Evidently these ossuaries were used not only for citizens of Jerusalem but for residents in other towns and even for Jews from other countries. Each stood on a shelf on the stone floor of the cave. One bore the name of a member of a silversmiths' guild; on another, two men were indicated as twins. These cave-tombs outside Jerusalem date from the Hasmonean period (c.175-160 B.C.) until just before the destruction of the second Temple. They yield considerable information about architecture in the Holy City of that era.

The *Biblical Archaeologist* relates how Sukenik, rummaging in the Russian Archaeological Museum on the Mount of Olives not long ago, came upon a slab clearly carved thus: "Hither were brought



208. Oldest group of social structures yet found in Bible lands, at Assyrian Tepe Gawra. The picture shows the acropolis mound and complex of temples, defense works, and homes. Pre-historic levels at Tepe Gawra of the fourth millennium B.C. correspond to ones near Ur in southern Babylonia. Some excavated structures date from before 4000 B.C. (*American School of Oriental Research*)

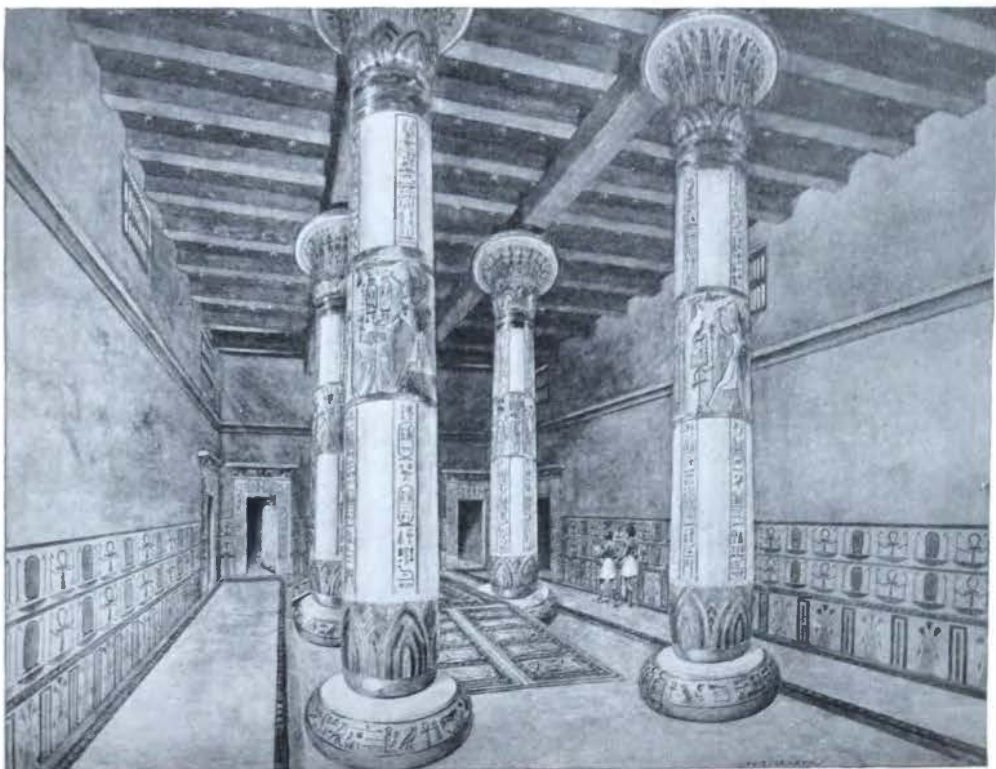
209. First and Second Pyramids at Gizeh, Fourth Dynasty Egypt, provided tombs for pharaohs who built them. Khufu (Cheops) erected the First Pyramid c.2800 B.C. It has a ground area of 13 acres and is half as high as the RCA Building in New York. One hundred thousand men worked twenty years building it. Each stone weighs more than a ton, and more than 2,300,000 stones were used. Khafre, now believed to be brother of Khufu, constructed the Second Pyramid; Menkaure, the Third Pyramid. Originally, the solid pyramids were encased with smooth stone surfacing, part of which still appears at top of Second Pyramid. Entrance to the tombs is on the north side of these structures, of which many were erected in Nile Valley.





210. Center section of the Great Ceremonial Stairway leading to the Royal Audience Hall of Darius and Xerxes, Persepolis. Relief sculptures running the length of the entire stairway depict a New Year's festival of Persian emperors. Babylonian New Year's Saturnalia fix Hebrew dates relating to the Captivity. On the right, guards stand at attention; Persian and Median spectators bring up the rear. The corresponding section on the left shows foreign peoples bringing tribute to the emperor. Panels in center symbolize the might of this great empire, with Persian royal "arms"—a lion attacking a bull—flanking a group of guards. Fluted columns in background are all that remain of the forest of them which once supported the roof of the Royal Audience Hall. (Oriental Institute, University of Chicago)

211. Reconstructed Throne Room of Merenptah of Egypt (1232 B.C.), thirteenth son of Ramesses II, who put down a revolt in Palestine and recorded it in one of the few Egyptian inscriptions mentioning Hebrews. Note the ramp to the throne; characteristic Egyptian lotus columns and bases, with wall motifs of ankh and lotus; solemn light from high windows. (University Museum, Philadelphia)





212. Beneath Roman masonry on a hilltop in Samaria appear rough remnants of Israel's palaces of Omri and Ahab (887-854 B.C.).

213. Tomb of Persian Cyrus the Great, in his "new" capital at Pasargadae, built perhaps by order of the king himself near the palace and temple. When Alexander the Great came here, he found the body of the clement king lying on the floor, stripped of its royal regalia. He ordered the body returned to its place and closed the entrance. The tomb is empty today. Rugged lines of the structure suggest the virile simplicity of the first great conqueror of Indo-European blood (d.529 B.C.). (*Oriental Institute, University of Chicago*)





214. Tombs built in Graeco-Roman style in the Kidron Valley below the east wall of Jerusalem. Burial places in Bible lands are always outside the city. The "scent-bottle" Tomb of Absalom, left of center, is in the Jewish burial section: square structure having Ionic cornice. Not until the sixteenth century A.D. was this tomb associated with II Sam. 18:18. To this day, Jews throw stones at it as they remember David's unruly son.

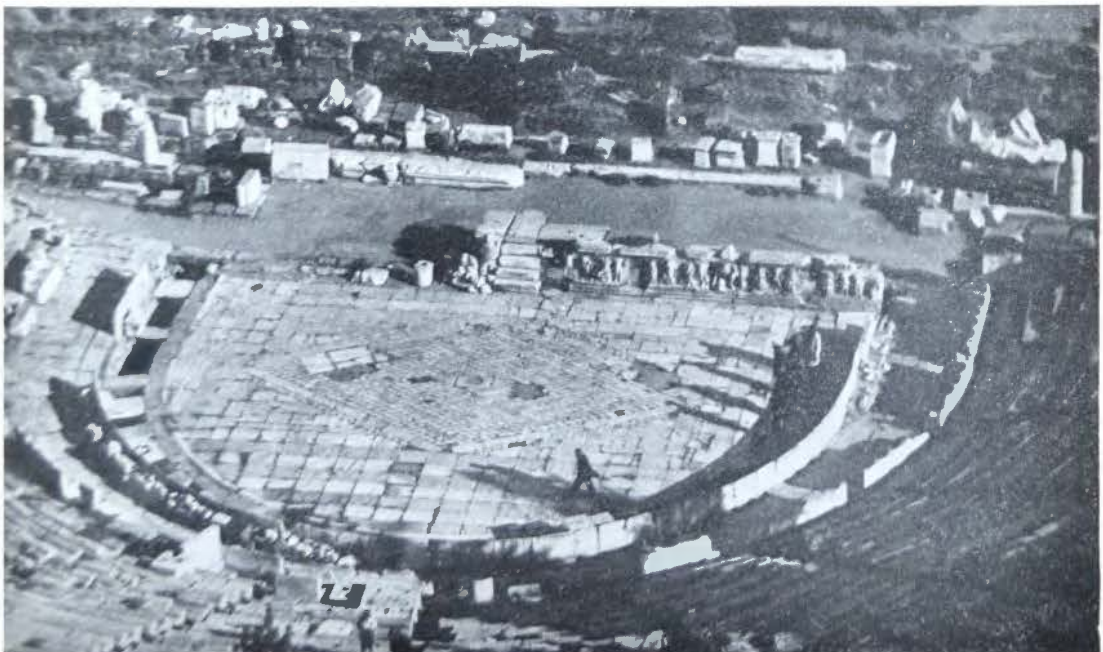
215. Entrance to Mamertine Prison, Rome, with quaint depiction of saints, Peter and Paul, uplifting their symbols—key and sword.



6. The Colosseum, Rome, begun by Vespasian and completed by Titus in A.D. 80, is the world's largest theatre, with room for 50,000 spectators. The elliptic amphitheatre is built of travertine outside, tuff and tufa within. The view in the picture shows the interior, with three tiers for spectators: the best for nobility, middle for wealthy citizens, and the poorest for populace. The cross marks the place where the amphitheatre where early Christians suffered martyrdom.



217. Theatre of Dionysos, birthplace of Greek drama, erected at Athens, 339 B.C. Developing from circular threshing-floor, the Greek theatre had a skene, or stage, an orchestra (semicircular area in picture) and coilon, or auditorium of seats. From the stage, stoa with colonnade led to adjacent temples sacred to the goat-god Dionysos, and built earlier than the theatre. Athenian Archons and priests occupied high-backed marble chairs, first row center. Seventy-eight rows of seats accommodated from 14,000 to 30,000 spectators. The Ecclesia or public assembly, which had held sessions on the Pnyx hill, met in theatre upon its completion. Sculptures on the proscenium, right, were carved in the era of Nero, to represent the birth of Dionysos and other scenes from his life.





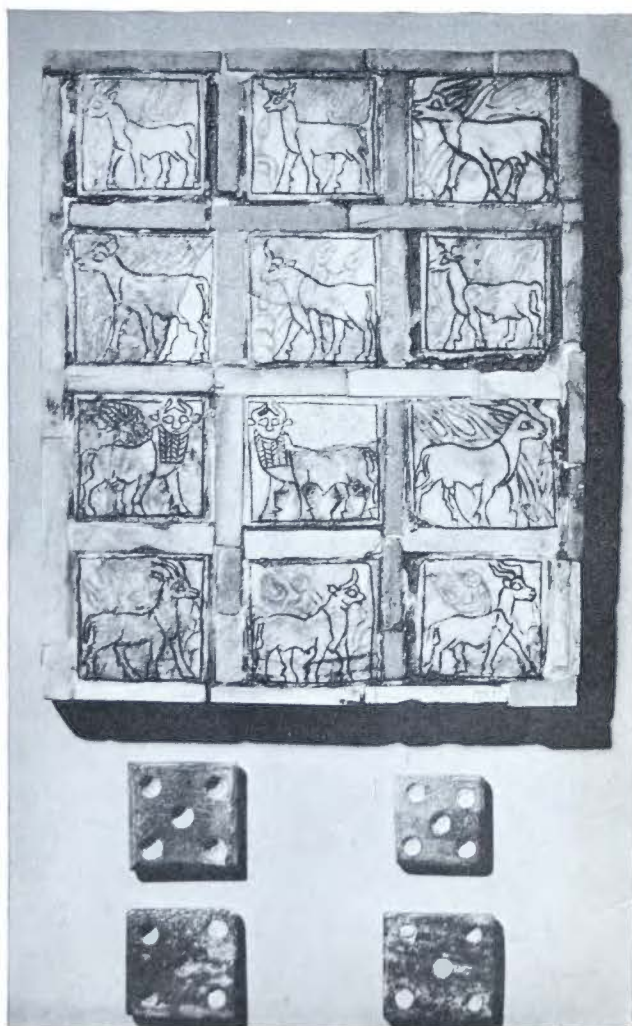
218. The Pnyx at Athens was an open-air assembly place in a semicircular hollow 120 meters wide and 70 meters deep. Constructed at the end of the sixth century B.C. when democracy was at its zenith. Here, in the fifth century B.C., Aristides and Themistocles addressed the people as Demosthenes, Aeschines, and others did in the fourth. The square platform with steps leading up to it was the famous bema of the orators. Upper left, the Parthenon, whose extravagant cost was criticized by citizens but justified by Pericles, speaking from the bema.

219. Amphitheatre at Putcoli, Italy, finished under Vespasian, replaced an older one. In the superstructure were dens for wild beasts used in arena shows. A conduit supplied water for flooding theatre when water carnivals (*naumachia*) were held. Here Nero amazed the Armenian king, Tiridates, by his exploits among the beasts. Paul and the early Christian church at Putcoli were no doubt familiar with the program of this amphitheatre (Acts 28:13, 14).





220. Dramatic masks in stone, near approaches to the theatre at Ostia.



221. Gaming-board from Sumerian Ur, c. 3000 B.C., inlaid with animals. These were used early among many peoples of the East. (University Museum, Philadelphia)

the bones of Uzziah, King of Judah—not to be opened.” This Aramaic inscription, the longest yet found from the time of Christ, had been placed on a new mausoleum for the king who ruled Judah (c.775 B.C.), when, for some reason, his bones had to be moved around the first century A.D. The Chronicler (II Chron. 26) tells the fate of this leprosy-stricken king.

CANAANITE TOMBS

As in many other matters, Canaanite custom influenced Hebrew rock-graves. Enormous Canaanite tombs in north Syrian Ras Shamra were provided with windows so that food and drink could be brought for the dead. These windows communicated with the interior of the chamber by a passageway. The funeral pit was under the stone floor, which robbers would have to force up before they could steal the treasures. One of the greatest dreads of rulers of Bible lands was to have their tombs plundered. This fear was often realized.

When Phoenician people of Sidon made stone sarcophagi in the likeness of human heads and placed them in hillside caves, they showed influence from Egyptian anthropoid coffins. Specimens of these have been found in the necropolis hill caves behind Sidon, by an early project of the American Schools of Oriental Research. Some of the anthropoid sarcophagi have beautiful Greek faces showing influences from the fifth and fourth centuries B.C. The skeleton of a Phoenician grandee found near Sidon revealed a remarkable piece of ancient dentistry, a bridge of gold wire looped from two sound “pillar” teeth.

EGYPTIAN BURIALS

EARLIEST FORMS

No people of the ancient Bible world gave more attention to burial than Egyptians. They believed in a future life which was a glorification of the one they had lived on earth. Elaborate provisions for food, water, and all sorts of creature comforts were made. Even embalmed pets were placed in the tomb. Often artists painted little windows on the sarcophagi

to keep the deceased in touch with life. This idea is very appealing.

Many books have been written about Egyptian mortuary customs, as John Garstang's *Burial Customs of Ancient Egypt*. A clear-cut account is given in *When Egypt Ruled the East*, by Steindorff and Seele.

Types of Egyptian tombs varied in successive ages. In earliest times, the body was placed in the natural position of sleep, on its left side, knees curled up and hands over face.

MUMMIFICATION

During the Old Kingdom the body was stretched to its full length in the sarcophagus, and the elaborate ceremony of mummification was adopted. The process included removal of viscera to Canopic jars of alabaster or marble, and elaborate wrappings of the body in linen sheets, crosswise and lengthwise, attached to the mummy with cords, linen bandages, or ribbons bearing the name of the deceased. We have seen in the University Museum at Philadelphia some of these linen wrapping sheets 24 yd. long and 1½ yd. wide, dating from c.1900 B.C. This museum has analyzed by X-ray the process of preparation for burials. After the last sheet had been bandaged, the body was put into a carton of papyrus. This case, in anthropoid shape, bore a head portrayal of the deceased and was painted with elaborate symbols, including the eye of Osiris, the *ankh*, or key of life, and the like.

After the last linen wrappings and ribbons bearing the name of a royal mummy had been put in place, a gorgeous gold and jeweled flat collar and often a huge heart scarab bearing the royal seal of the ruler were placed on the body. Sometimes a scepter was placed in his hands; and over the face or breast, a flat gold depiction of the protective vulture with outstretched wings.

During the process of mummification, which required seventy days, brains were removed, and resinous paste was inserted in the head, as in other parts of the body, to help it retain its original shape. Each of the four Canopic jars containing the viscera had as a lid the head of an animal-

deity who was patron of the body and who guaranteed freedom from hunger and thirst. Fine series of such Canopic jars are in the University Museum at Philadelphia and at the Metropolitan Museum of Art.

The mummy of a pharaoh such as Tut-ankh-amun was placed in a series of precious cases, the last of which is shown in illustration 154. Special permission was given to the authors by the Egyptian Museum at Cairo, to make this photograph. The case, of solid gold, inlaid with lapis lazuli, carnelian, and enamel, is one of the choicest *objets d'art* of the ancient world. Nobles insisted upon being encased in at least three coffins, all placed in an outer "house."

MASTABA

The mastaba, or grave of nonroyal people during the early dynasties, evolved from the simple trench into which the body had been lowered and over which a mound of earth was heaped; in front was a space where food offerings could be left. Then a rectangular superstructure of brick or stone was placed over the grave, as we have seen all over the Syrian Desert and in Turkey. In the vicinity of the Great Pyramids at Gizeh and at Saqqarah countless mastabas of nobles were built, in the shadow of the costly pyramidal resting-places of their pharaoh.

PYRAMID TOMBS

When several mastabas were placed one on top of another, in a receding zoned effect, the Great Step Pyramid such as we have seen at Saqqarah developed in the Third Dynasty. This is the world's oldest stone structure today. From the Stepped Pyramid there was but one more stage to development of the square-based perfect pyramidal form of tomb which became popular at Gizeh (illus. 209) and elsewhere along the Nile. Even Rome in the last century B.C. boasted a pyramid, of Gaius Cestus, seen by Paul.

The Saqqarah Pyramid was built by King Djoser in the Third Dynasty. The three Great Pyramids at Gizeh were constructed in the Fourth Dynasty for Khufu

(Cheops, c.2800 B.C.); Khafre or Khephren; and Menkaure. The Fifth Dynasty buried its pharaohs south of Gizeh, at Abusir, whose pyramids were much smaller.

At Saqqarah, also, is the Serapeum, a series of subterranean tombs of the sacred Apis bulls and their chapels. A sphinx surviving today from the sphinx avenue which once approached the Serapeum appears in illustration 41.

The pyramids at Saqqarah and at Gizeh were hard by superb temples, excavated admirably within the last generation—the former by Firth and the Gizeh ones by George Reisner, of Harvard, and other archaeologists. Delicately fluted little columns, reminding of the Greek Ionic ones coming many centuries later, are parts of the Saqqarah pyramid temple which have challenged modern excavators to speculate on their evolution.

Egypt loaned Palestine many of her burial customs, including the use by women of tear-bottles. A reference to these is made in Ps. 56:8, where the chief musician, pursued by enemies, implores Jehovah:

Put thou my tears into thy bottle.

ROCK-CUT TOMBS OF THE KINGS

During the New Kingdom in Egypt, pyramid and mastaba fell from favor, and the rock-cut tombs of the Valley of the Kings in an isolated section of the Libyan Desert became the royal necropolis. Much has been written about tombs such as that of Tutmosis III at Thebes and the artistic mortuary temple of Queen Hatshepsut. For the superlative findings in the tomb of Tut-ankh-amun, whose treasures have left us spellbound, see Howard Carter's large volumes. And for an interesting "unwritten chapter" on the famous expedition for Lord Carnarvon, see Charles Breasted's *A Pioneer to the Past*.

The Egyptian sepulchre of Akhenaton would consist of a passage cut along a rocky hill in the desert, leading to a column-supported hall where the pink granite sarcophagus of the pharaoh lay. A hall opened into a second chamber and passage, intended to lead to a burial chamber for his queen.

Whether tombs were cut in the rock or

built above ground, they were usually made into places of radiant happiness by low reliefs carved on the walls or paintings in gay colors, depicting as at Saqqarah in the Tomb of Tiy scenes from well-loved daily life in prosperous Egypt.

During the Ninth and Tenth dynasties, miniature models of men and maidservants carrying baskets of bread on their heads, of butchers carving meat, or of tenants bringing tithes of animals, such as oxen with red lines around their throats indicating blood, were placed on trays in tombs. These took the place of the wall paintings and reliefs used earlier. We have seen good examples in the University Museum at Philadelphia.

James H. Breasted had the privilege of deciphering in the Cairo Museum the inscription on the superb gold-encrusted coffin of young Akhenaton, the "world's first monotheist" and founder of the city of Amarna. The mutilated name of the king was followed by these eloquent beautiful words, "The beautiful Child of the Sun (Aton) who lives here forever and forever, for it is true in the sight of earth and sky"—one of the choicest tomb inscriptions found in any age in any country. Breasted also located, in a museum packing box, the skull and bones of this pharaoh and persuaded the Museum to return them to the original coffin. To their credit, let us say that the Cairo Museum no longer displays, as formerly, the mummy of Seti I, looking oddly like a late American oil magnate.

IN MESOPOTAMIA AND PERSIA

The earliest Mesopotamian tombs we knew, such as the Royal Tombs from Ur excavated by Woolley, were underground houses, sometimes vaulted or domed. Like the Egyptians, the Sumerian kings desired material surroundings, similar to those they had enjoyed in life, to accompany them to burial. Thus court personages and horses were buried alive, as we know from the excavated tomb of Queen Shub-ad and her husband at Ur. Woolley reported that no semblance of a god or religious emblem was found in the royal Sumerian graves. Immortality had not yet developed a spiritual connotation, apparently.

Later Babylonians, like the Romans, cremated their dead and placed their ashes in beautiful glazed crematory urns. One of these artistic jugs T. E. Lawrence, in his *Letters*, tells of buying at the Hittite capital, Carchemish.

In present-day Shush (Susa) a so-called "Tomb of Daniel," a strange scent-bottle steeple, is "pilgrimaged" by Moslems.

The tombs of eight of the nine great kings of Persia have been identified. That of Cyrus the Great (c. 529 B.C.), tolerant ruler who issued an edict permitting the Jews to return home from Babylonian Captivity, is a small standing structure of simple, massive stone on a lonely stretch near Pasargadae northeast of Persepolis (illus. 213). Its simple outline is similar to that of a temple, recently found by Herzfeld, built by Cyrus near his palace and tomb. Cyrus had possibly prepared the tomb during his lifetime. When Alexander the Great conquered (330-324 B.C.) the kingdom founded by Cyrus two centuries earlier, he found this tomb robbed of its treasures, and on the floor lay the body of the founder of the great Persian Empire. Thus ended the record of the proud Persian conqueror of the young Chaldean prince, Nebuchadnezzar, whose fate is recorded in Dan. 5.

An air view, taken by the Oriental Institute of the University of Chicago, shows the tombs of the Achaemenid line of Darius, Xerxes, and Artaxerxes cut in solid rock near Persepolis. Those of Darius I and Artaxerxes I have little façades of small columns, suggestive of rock-cut Petra. Above the colonnade of Darius is carved a representation of this pious Zoroastrian ruler worshipping Ahura Mazda before a fire altar. A lengthy inscription on the front of the tomb describes the religion of the brilliant statesman-king, whose empire organization was a marvel of ancient times.

GREEK TOMBS

Early pre-Hellenic Greek tombs were *tholoi*, beehive-shaped, similar to homes of that period. As in Crete, burial pits with offering tables were used in archaic Greece.

In the crowded section of Athens, near the Dipylon Gate, beautiful structures stand above interred bodies in this cera-

mists' section known as the Potters' Field. For graceful urns and carved monuments here, see illustration 64. In wealth of carved marble it has been exceeded during modern times by Genoa's Campo Santo.

The stately tomb of King Mausolus of Asiatic Caria (erected c.353 B.C.) became not only one of the Seven Wonders of the World but the forerunner of countless other mausoleums. The most handsome Greek sarcophagus recovered from the ancient world is that of a supposed general of Alexander the Great, discovered at Sidon in 1881 by Eddy, an American missionary.

The vital carvings of rich, tinted tomb reliefs are masterpieces of Hellenistic art. In the Naples Museum we noted a scene decorated with the grapes of Bacchus, possibly the best loved deity of the owner in life.

A unique Greek "community" tomb is the mound of Marathon, called the Soros, an artificial hillock built bit by bit by patriots to cover the place where 192 of the Athenian forces fell in 490 B.C. These heroes were defending their freedom-loving land against Persian invaders.

ROMAN TOMBS

Early Romans favored cremation and placing of ashes in columbaria—not unlike the filing-case arrangement of modern crematories on the edge of crowded American cities. Columbaria were originally boxes where pigeons lodged. Then, built in artistic forms, they became repositories for human ashes. We have seen them near Virgil's Tomb at Naples. At ancient Ostia, port of Rome, and in Pompeii they were also used. Sometimes the columbaria were built by funeral clubs which arranged the terra-cotta urns in their niches. At Palmyra and other Roman cities of the Middle East, columbaria were common. Some of these, beautifully carved with busts of the deceased, have been brought to the new Damascus Museum from Palmyra, a cosmopolitan center in the third century A.D. when Queen Zenobia ruled Syria, Asia Minor, and Egypt.

The Appian Way, leading into Rome, is lined with hundreds of tombs of the well-to-do of the Empire period. Some are

towers, others are flat slabs, and still others are standing steles and mausoleums. Paul passed these as he walked from his port of Puteoli to the Eternal City. Every well-set-up provincial city of the first-century Roman regime had a Street of the Sepulchres; at Pompeii it was approached by the Street of Consolation, with its wineshop at the crossroads. Prosperous Ostia, whose meticulous excavation was one of the few sane acts of the Fascist regime, also had such a street.

In earliest Christian times in Rome, followers of the new way of life buried their dead in catacombs, a form of tomb originating with Etruscans long before. In underground, labyrinthine passages wide enough for only one person, bodies were interred stretched to full length. Sarcophagi were not used, but *loculi* held four or more corpses. Panels were inserted to close the *loculi* or compartments, and on these the names of the occupants, or Christian emblems, such as the sacred monogram, the fish, the shepherd, or orans (praying man), were carved or painted. In times of persecution the underground passages, which contained chapels in connection with family vaults, were used for worship and for celebration of the Eucharist, which was part of the early Christian burial ritual. We have walked through the dark Catacombs of St. Sebastian near the Appian Way, where Paul and Peter were said to have lain before removal to the basilicas bearing their names today. We tried to absorb details of Christian iconography while our wine-soaked guide let his candles burn out and called for our small electric flashlight to get us above ground again. Some scholars attribute the development of catacomb burials to Jewish Christians at Rome, whose families had been accustomed to rock-cut tombs in Palestine. The Catacombs of Callixtus at Rome, those of St. John at Sicilian Syracuse, others at Egyptian Alexandria, and more in the Sidonian necropolis to which we have referred offer interesting material for study.

WEDDING CANOPY

Not a building yet certainly a social structure is the wedding canopy used for

generations in nuptial rites of pious Hebrews. This canopy was called the *huppah* and suggested the Tabernacle tent above the heads of the couple. Such a bridal canopy we saw used at a modern wedding in Jerusalem. The bridegroom advancing to the *huppah* to meet rabbi and bride is smiling with the proverbial joy recorded in Ps. 19:5. There is a religious symbolism in the breaking of the wine glass which has just been used at the marriage consecration. Witnesses saw in that act a warning to remember the destruction of the Temple. Jesus' Parable of the Virgins who went to a wedding reflects an ancient custom of his people. At the home of the bride's parents, the girls chat excitedly, wait for the groom, and finally grow sleepy. Meantime, the men guests have come to the home of the groom after their day's work. The tired males are slow in dressing

and then take time to eat. About eleven at night they are ready to proceed by torchlight; near Jerusalem we have observed such a dramatic procession moving with torches flickering on swarthy faces. To the virgins comes the shout, "The bridegroom cometh!" The wise virgins, who have brought in their tiny oil pot (illus. 68) a supply of extra oil, are prepared for the joyous event. The careless ones have no oil to welcome the midnight wedding party and must go forth into the outer darkness (Matt. 25:1-13). They forego the ceremony of the canopy.

Once, the author met a peasant Arab wedding party proceeding by camel to the ceremony. This colorful, joyous company was on the outskirts of Cana of Galilee, where Jesus and his mother once attended a wedding (John 2:1).

ADDITIONAL BIBLE REFERENCES

"gold and silver vessels . . . which Nebuchadnezzar took forth out of the temple which is at Jerusalem" (Ezra 6:5)

"Jehovah is in his holy temple" (Ps. 11:4)

"Jesus entered into the temple of God, and cast out all them that sold and bought in the temple" (Matt. 21:12)

"and his disciples come to him to show him the buildings of the temple" (Matt. 24:1)

"This man said, I am able to destroy the temple of God, and to rebuild it in three days" (Matt. 26:61)

"Abijam . . . they buried . . . in the city of David" (I Kings 15:8)

"Hezekiah . . . they buried . . . in the ascent of the sepulchres of the sons of David" (II Chron. 32:33)

"ye build the sepulchres of the prophets" (Matt. 23:29)

"in the chamber of Gemariah the son of Shaphan the scribe, in the upper court" (Jer. 36:10)

BIBLIOGRAPHY

American Schools of Classical Studies, *Ancient Corinth, a Guide to the Excavations*, Hestia Press, Athens.

American Schools of Oriental Research, *Biblical Archaeologist*, various numbers, New Haven.

Breasted, Charles, *A Pioneer to the Past*, Charles Scribner's Sons, New York.

Breasted, James H., *Ancient Times*, Ginn and Company, Boston.

Burrows, Millar, *What Mean These Stones?* American Schools of Oriental Research, New Haven.

Fisher, Clarence, "The Throne Room of Merenptah," *Journal*, Vol. 12, 1921, University of Pennsylvania, Philadelphia.

Gordon, Cyrus H., *The Living Past*, The John Day Company, New York.

Josephus, Flavius, *The Jewish Antiquities*, John C. Winston Company, Philadelphia.

Lawrence, T. E., *Letters*, Doubleday, Doran & Company, Inc., New York.

- Macalister, R. A. S., *A Century of Excavation in Palestine*, Fleming H. Revell Company, New York.
- May, Herbert G., and Graham, W. C., *Culture and Conscience*, University of Chicago Press, Chicago.
- Murray, Margaret A., *Petra, the Rock-Red City of Edom*, Blackie & Son, Ltd., Glasgow.
- Rowe, Alan, news item, "Serapeum and Library at Alexandria," *The New York Times*.
- Schaeffer, Claude F. A., *The Cuneiform Texts of Ras Shamra-Ugarit*, Humphrey and Milford, London.
- Weigall, Arthur, *The Life and Times of Akhnaton*, T. Thornton Butterworth, Ltd., London.
- Winlock, Herbert E., *Excavations at Deir el Bahri 1911-1931*, The Macmillan Company, New York.

VITICULTURE

I am the vine, ye are the branches.

—John 15:5

Introduction

The Heritage of Vines

The Royal Vineyards

Steps of Cultivation Revealed by Isaiah

Joy of the Vintage

Uses of the Grape

Details of Vine Culture in Parables of Jesus

Old Testament Laws of the Vineyard

Vines and Worship

Vines as Symbols

Egyptian Vintage, 1400 B.C.

Italian Vines

The Glory of Corinthian Grapes

Additional Bible References

Bibliography

INTRODUCTION

The Bible supplies a very satisfying picture of vine culture, especially of the grape-vine (*vitis vinefera*). It contains more references to this important industry which supplied a refreshing and wholesome food to the people than to many other topics of our commentary. Isaiah (5:1, 2) and Jesus, in his parables, outlined step by step the stages by which a family grew its own vines. They and other religious teachers saw in the vine an expressive symbol of the family and of the indwelling of the individual in God and Christ. Tender grapes, sour grapes, wild grapes, imported grapes, grapes whose blight cast their clusters before time or whitened their leaves—all these appear on pages of Scripture. It was inevitable that the summer fruit basket of Amos should contain grapes (8:1). Jesus himself was called a shoot out of the stock of Jesse, "And there shall come forth a rod out of the stem of Jesse, and a branch out of his roots shall bear fruit" (Isa. 11:1).

THE HERITAGE OF VINES

Viticulture (from the Latin *vitis*, meaning "vine") was practiced in most ancient times on hillsides north of Syria. From this

region which has enriched world civilization with so many cultural suggestions, vine cultivation spread to other Mediterranean lands as far west as Spain. These shores, whose natural terraces on mountain sides are warmed by sweetening sun, soon made grapes indigenous in Italy, Greece, Egypt, Palestine, Syria, and what we know as Lebanon.

Many a Palestinian and Syrian had no economic resources other than terraced vineyards. Not only livelihood but sentiment bound an owner to his grapes. The very thought of having foreigners seize the vines which Hebrew families had planted was a sum total of woe.

This was the fundamental reason why Naboth refused to sell his vineyards even to King Ahab, who exercised the right of royal domain to gain the ground when he wished to extend his royal herb garden. "Naboth said to Ahab, Jehovah forbid it me, that I should give the inheritance of my fathers unto thee" (I Kings 21:3).

If a man owned vineyards, he could mortgage them and invest his money. Too, he could use them as security for borrowing money when time came to pay his "income tax" to the king's tribute chest.

Canaanites and Amorites had viticulture well in hand before the arrival of Israel. We know this from Joshua's story of the

spies sent into Canaan. They returned from the Valley of Eschol (meaning "cluster") with a bunch of grapes so heavy that two men carried it on a stick between them. This dramatic proof of a land "flowing with milk and honey" made the wanderers all the hungrier for vines and home. Eschol still produces fine grapes.

A picture of how men of Shechem, before the conquest of this town of Israel, trod out their grapes, held festivals, and went up to the house of their local god to eat and drink is revealed in Judg. 9:27.

Often the Hebrews, in times of wandering away from Jehovah, offered to Baal their tithe of fresh grapes, to the disgust of such prophets as Hosea. Perhaps this was the background of his condemnation of those "that turn to other gods, and love cakes of raisins" (3:1). In time, one of the psalmists described his people themselves as a vine which Jehovah had brought out of Egypt and planted where there was plenty of room for it to grow, so that

The mountains were covered with the
shadow of it
And the boughs thereof were like cedars
of God.
It sent out its branches unto the sea,
And its shoots unto the river

Then came a calamitous time when men who passed by broke down its hedged walls, plucked its fruit, and even burned the stock which Jehovah had planted (Ps. 80).

THE ROYAL VINEYARDS

Throughout centuries of Hebrew history, kings of Judah and Israel prided themselves on their vines. At Jerusalem, "the king's vineyard" was a well-known landmark, so that people said, "It is so many paces from the king's vineyard to the house of so-and-so."

We know that vine cultivation and storage in skin bottles were prevalent in Palestine even while David was still a refugee-chieftain, escaping the wrath of Saul by hiding in the Wilderness of Paran and guarding the sheep-shearers of Mount Carmel. For when a gift was taken to him and his guerrillas, it included "two skins of wine . . . and a hundred clusters of

raisins" (I Sam. 25:18). And when David set up his well-organized kingdom of the tenth century B.C., he set Shimci the Ramathite over his vineyards and Zabdi the Shiphmite "over the increase of the vineyards for the wine-cellar," even as he appointed Shitrai of Sharon over his herds that grazed in the plain (I Chron. 27:27-29).

The conquering David was like Lucius Quintus Cincinnatus. This Roman, about 500 B.C., left the furrows of his Italian farm to gain brilliant military victories; then, having deposited his booty at the public temples, he returned to cultivate his rich farm land.

King Uziah, Judacan contemporary of Isaiah in the eighth century B.C., not only rebuilt fortified defenses of Jerusalem, watchtowers in the wilderness which rimmed the capital, and cisterns for his cattle, but maintained a staff of vine-dressers in the Judacan mountains and probably at Carmel headland, also, "for he loved husbandry." Here was a royal farmer whose tastes were like those of Frederick the Great, growing his famous grapes at Potsdam's "Sans Souci" palace, or like those of "a country squire in the White House."

The King of Edom, too, through whose land Moses wished to lead his company trekking up from Egypt, used his fertile highlands east of Jordan to cultivate vines. "Behold," the Hebrew leader said to this Edomite king, "we are in Kadesh, a city in the uttermost of thy border. Let us pass, I pray thee, through thy land: we will not pass through field or through vineyard." But Edom refused safe conduct to the scrupulous Moses (Num. 20:14-21).

Elders of Israel came to Samuel at Ramah, clamoring for a monarch such as their neighbors had, instead of continuing a theocracy with God as ruler. To them the prophet foretold that a king would force their sons to tend his horses and chariots, plow his ground, and fabricate his weapons; and would make cooks and perfumers and bakers of his daughters; and would collect a large tax in vines to give his officers (I Sam. 8:4-14). Behind the extensive vineyards of every king of Judah and Israel lay the sacrifice of small men's vined terraces.



222. Palestinian pruning his grapevine, "that it may bear more fruit" (John 15:2). (Matson Photo Service, Jerusalem)

223. Sturdy Polish Jewess cultivating vines on the Plain of Esdracelon.





224. Carting the grape harvest into Zikron Ya'aqov, an old Jewish agricultural colony in Palestine. Ceremonial wine is exported from here to Jewry of the world.

225. Woman hawking Hebron grapes in a vegetable market, Bethlchem.



Egyptian pharaohs were always "farmers at heart," taking personal pride in their level fields, rich unto the yielding of several crops per year.

STEPS OF CULTIVATION REVEALED BY ISAIAH

The prophet Isaiah, who lived among the terraced mountains of Judaea which produced large grape harvests, dramatically pictured, in his fifth chapter, the stages by which vine-growers developed their vintage. First, a husbandman selected "a very fruitful hill" where soil was rich, even if stony, and where subsoil water supply was sufficient to carry the vines to the summer fruit-bearing season. Each "zoned" terrace had a wholesome share of mild sunshine in the plateau between the Mediterranean and the Jordan rift. Then the cultivator, says Isaiah, "dugged" his vineyard; that is, he freed it of superfluous stones with hoe or plow as he opened it for cultivation. Next he set in the choicest young plants, each about three paces from the next stock, in orderly rows. To safeguard the valuable vines as they developed, he took the extra rocks and "built a tower in the midst" of his vineyard. In the round, stone tower, a sort of high, one-room cottage, he and his family lived in vintage time when wife, children, and relatives were all needed to pluck the clusters. Between harvests, the tower, which often was 40 ft. high, was occupied by a watchman.

The whole vineyard was enclosed with a stout stone wall, which was often topped with a hedge to protect the vines from robbers and prowling animals. Every cultivator knew that "little foxes spoil the vines." Foxes, or foxlike jackals, are so prevalent today in Palestine and Syria that all over the hillsides of the grape country we see jackal-scares made of whitewashed stones set on top of one another to a height of about 3 ft. They remind us of the scarecrows which ward off crop scavengers in America.

In March the cultivator's first grape buds appeared, promising new branches; and in early April the delicately fragrant blossoms came. Then the vine-dresser, with his sharp pruning knife (*mazemerah*), cut away branches producing no healthy

leaves, to drive the strength into a few main stocks. He cut so much away that it seemed as if he had left only stumps of vines, trimming close to the stems and allowing not more than 2 or 3 ft. of vine to remain (see illus. 222, a man pruning). After the cutting-away process each spring, the entire vineyard was dug with a small, long-handled spade. Above the blade was a piece of wood on which the grower placed his foot to drive in the spade. Fertilizing was known as "dunging" the vineyards. The owner had a right to look for a fine crop in July, August, September, and October, depending on the variety he had planted. Palestine has always produced luscious green-white Hebron grapes for markets of Bethlehem and Jerusalem, and red ones and many other sorts, including the tiny black grapes that make the famous "Zante" currants of Greece.

To complete his provision for a profitable vintage, the Palestinian vine-grower built in his vineyard his own wine press, hewn out of solid rock and lined with mortar or small stones. He made an upper receptacle to receive the clusters of ripe grapes, which were trodden thoroughly by the feet of many men stamping over them; the juice flowed into a lower vat. Yet, with all this foresight, Isaiah's man who expected that the vineyard "should bring forth grapes" saw, alas, that it yielded only sour wild grapes, good for nothing. The ruthless unproductiveness of the well-tended vineyard was like the men of Judah, in whom God looked for justice but saw only oppression.

Wine presses cut in solid rock have been found near the enigmatic caves of Beit Jibrin, on the road from Jerusalem to Lachish. Some are single square vats in which the grapes were trodden out. Others had three sections, one for trampling out, one for refining, one for storing the juice.

The grape-gatherers were often a different set of workers from the vine-dressers whose skill pruned the vines. Even women and children could cut the harvest and pack it in the traditional baskets, mentioned by Jeremiah (6:9), to carry the fruit to the wine press.

Wagons, or carts such as were used in early Egypt, still transport heavy grape harvests to the presses where sacramental

wine is made, as we have seen at Zikron Ya'aqov. This is an old labor settlement in present-day Palestine aided by Baron de Rothschild; it owns extensive vineyards and olive groves on the fertile Plain of Sharon, from which exports go abroad in time of peace to world-wide Jewry. Illustration 224 gives a glimpse of this wholesale but primitive wine-press establishment.

In Roman times, Palestine and Syria had to import wines to supplement their own production, even though the Negeb and the valley south of Beersheba and the Red Sea, as well as fruitful Galilee, were terraced with vines. This is attested by numerous huge Rhodian pottery wine jars found in many of the excavated sites of Bible lands.

Each Rhodian wine-jar handle is carefully stamped with the name of the magistrate and the year when the bottling was done. Quite as efficient a system as modern dated coffee!

The unproductive branches of Isaiah's vine-dresser deprived him of the joyous September vintage season, with its songs and festivities of neighbors. Perhaps it would have been better had he selected another site, he thought. We have seen the rich terraced vineyards of Samaria's hill country and others high up in the sun-blessed Lebanon mountains. The famous vineyards near Hebron send their clusters from the Valley of Eschol to market in Bethlehem, where their arrival is signal for all the native craftsmen to run up from Manger Square and the dark little back streets, to eat their fill of the first ripe grapes offered by the stately Bethlehem market women (illus. 72). Palestinians have an inherited taste for grapes which they need not and will not resist. We have joined them in enjoying the luscious fruit of the vines in July. Their spicy flavor we shall never forget.

Not all the vineyards are on hillside terraces. We have seen young Polish Jews irrigating and using the mattock on new plantations of grapevines on the Plain of Esdraelon (illus. 223). And we have seen luscious grapes ripe in an oasis on the hot Plain of Jericho. In towns like Ramallah, vineyards run out from private homes, in strips side by side. Vines are the main wealth of many a family in Bible lands to-

day. Growers get their own fruit supply, export dried clusters, and make wine of the balance.

JOYS OF THE VINTAGE

When the new grapes were gathered and deposited at the presses, the whole community joined in a harvest festival which was incorporated into the Feast of the Tabernacles, even as the American fall harvests gave rise to Thanksgiving Day. Whole families lived in their booths, towers, or stone cottages, a custom which reminded them of days of wilderness wandering. Joyous songs were part of the country merry-making. New wine, they said, cheers "God and man" (Judg. 9:13). There were singing in the vineyards and happy shouting among the men who tramped the grapes in the presses, staining their garments red with the blood of the fruit. The wine-pressing lasted into November and December.

Some of the oldest portions of the Bible are vintage songs. Possibly Second Isaiah gives us a snatch of an ancient vintage song: "Thus saith Jehovah, As the new wine is found in the cluster, and one sayeth, Destroy it not, for a blessing is in it: so will I do for my servants' sake" (65:8).

It was customary for several men to trample together in the wine press. Hence the poignancy of Isaiah's allusion to treading the wine press alone (63:3).

No wonder the people living in uneventful little Palestine were sorry when the happy vintage season was over, even as peasants in Bulgaria today regret when the rose-gathering and apple festivals end. "Woe is me! for I am as when they have gathered in the summer fruits, as the grape gleanings of the vintage: there is no cluster to eat," cried Micah (7:1).

USES OF THE GRAPE

Best when eaten direct from the vines, grapes of all Bible lands have been a source of welcome refreshing. Green grapes were early found to have a wholesome laxative effect. Lawrence, in one of his letters from Carchemish, capital of the Hittites on the Euphrates, once wrote to his brother

back in England, "I have come to the time of new grapes, and this means many delights washed down with the sauce of the terror of appendicitis. Tell Mother I will write before long from Aleppo."

We have already referred to the making of wine at the presses. Many families consume their season's output while it is still sweet, using wine as we do fruit juices. Colonies of Christian friars usually grow their own grapes. The Benedictine fathers at Emmaus (Abu Ghosh) have a mystical custom of offering a fresh biscuit and a small glass of their own grape beverage to everyone who halts, lest again Jesus come by and be not recognized, as on the first Easter evening at Emmaus. We were impressed by their sacramental hospitality.

The drying of many grapes on roof-tops of villagers is an ancient custom which still prevails. Raisins are an easily transported food, light in weight, and nourishing, as other forms of dehydrated fruits are proving to be today. Es-Salt in Transjordan is a center for curing raisins. The grapes are washed and bathed in olive oil and lye which soften them and ward off insects. Then they are spread out in the sun until ready to pack.

Another grape product is *dibs*, a boiled-down molasses-like treacle or jelly, sweet and popular with easterners.

DETAILS OF VINE CULTURE IN PARABLES OF JESUS

Jesus, who lived most of his life in the hill country of Galilee, used many details of the vineyard in his picture-stories about the Kingdom of God. "The kingdom of heaven," he said one day in Galilee to his mountain-side audience above the lake, "is like unto a man that was a householder, who went out early in the morning to hire laborers into his vineyard" (Matt. 20:1). The cultivator knew he would find workmen in the market place, for there they usually waited hire and bought bread for breakfast while they waited. Time and again the vineyard owner returned to the market place that day to hire more men. His acreage was large, and there was no time to waste if he would get in the vintage before it spoiled. Even at the eleventh hour, he was still employing help-

ers. This occasioned a dispute about wages, since those who had been engaged for a shilling at the early morning hour resented payment of like amount to men brought into the vineyard for only the last hour. The fair-minded cultivator rejoined, "Is it not lawful for me to do what I will with mine own? . . . the last shall be first, and the first last." This is a true picture of the antisocial capitalistic backgrounds of our Lord's time. Each laborer was given individual consideration in Jesus' ideal of legislation.

In another parable, Jesus referred to the custom of having one's own sons share in digging, pruning, and plucking. One son, who had promised his father that he would help, absented himself from the vineyard; the other boy, who had said that he would not, finally went to work. Jesus asked his carping Temple audience of priests and elders which of the two "did the will of the father." He then drove in the truth that even publicans and harlots would enter the Kingdom before those who were so skeptical about the Messiah that even when they saw his good works, they would not repent and believe his divine sonship (Matt. 21:28-31).

Mark and Luke both relate a parable which reveals the Palestinian custom of renting out a vineyard to a husbandman when a landowner had more terraces than he himself wished to cultivate. Presuming on his prestige of possession, the owner would send a servant at vintage time to commandeer shares, even if the crop were so poor that the tenant-vine-dresser's own children dared not touch a cluster lest the rent go unpaid. Recalling this well-known custom, Jesus told how an owner, having rented his vineyard, went into a far country, and when he returned at grape-harvest time, thirsty and dusty, he sent his servant for fruit. The tenants beat the servant "and sent him away empty." A second servant was sent by the owner, and this man was beaten and killed. Then a son was dispatched, for the landsman was certain that he would be respected. But the well-beloved heir was killed and tossed out of the vineyard, and the terraces were seized by the tenants. Jesus, picturing the expulsion of the husbandmen and the renting to other vine-dressers, made a

dramatic portrait of himself, sent by the Father, rejected, yet "made the head of the corner" (Mark 12:10).

On still another occasion, Jesus set the scene of one of his famous stories in a vineyard. He used the well-known fact that often fruit trees were grown among vines—especially fig, and often olive and mulberry trees. This was allowed by Mosaic laws, which forbade planting more than one variety of grapes in a vineyard. It also enabled a man literally to "sit under his own vine and fig tree"; for while vines were usually allowed to trail along the ground, with only stout sticks to prop them up when bearing clusters, they were often trained onto trees or over trellises. In the Arab village near the excavated mound of mighty Beth-shan commanding the Valley of Jezreel, we were once hailed into the vineyard of a poor man to rest after our wandering over the "dig." His first summer grapes were just ripe, and he insisted on our refreshing ourselves with grapes, washed in his not-too-clean well water. But we survived.

In a parable of Jesus recorded by Luke (13:6-9), a certain man who had a fig tree planted in his vineyard looked for fruit for three years and found none. He ordered his vine-dresser to cut down the worthless fig. But the patient cultivator pled that it be left "this year also, that he might dung it and dig it again"; and if by another year it was unproductive, then he would chop it down. The lesson in the hopeful patience of a farmer was apparent without application.

When Jesus warned against putting new, bubbling wine into old wineskins too weak for the fermenting strength of the contents, he pictured the ancient custom of storing fresh juice in skins. Jews had learned this from Canaanites soon after their conquest of portions of Palestine. Sometimes oxskins containing 60 gal. were used. From these, wine was poured into smaller goatskin bags which had been tanned and coated with grease to prevent evaporation. As many as 500 goatskin containers were stored in the cool cellar of a prosperous man. In some countries, notably Italy and Greece, Rhodes and Crete, enormous pottery wine-storage jars were used. These were set down into the ground

halfway to their top, to keep the contents cool.

In addition to his parables of vine culture, Jesus couched several profound religious sayings in terms of the everyday activity of his people. Stressing the life of productive service he expected every disciple to live, he said to his pupils on Mount Hattin above the Sea of Galilee (illus. 126), "Do men gather grapes of thorns, or figs of thistles? . . . Every good tree bringeth forth good fruit." Probably his hearers were sitting within sight of the fruitful vines of the hillside that beautiful summer evening as he spoke, or were even munching clusters from their own plots.

Again, at the last supper he enjoyed with his disciples in the upper room at Jerusalem on Thursday night before his crucifixion, Jesus drew from the familiar and beautiful vine, his message about the indwelling of his disciples in him and in God. "I am the true vine, and my Father is the husbandman. Every branch in me that beareth not fruit, he taketh it away: and every branch that beareth fruit, he cleanseth it, that it may bear more fruit. . . . Abide in me, and I in you. As the branch cannot bear fruit of itself, except it abide in the vine; so neither can ye, except ye abide in me. I am the vine, ye are the branches: he that abideth in me, and I in him, the same beareth much fruit: for apart from me ye can do nothing. If a man abide not in me, he is cast forth as a branch, and is withered; and they gather them, and cast them into the fire, and they are burned" (John 14). Thus did Jesus use all the well-known stages of cultivation of the vine to make clear his relation to the faithful.

At this same sacred meal, Jesus honored the vine by taking the cup filled with its juice, such as had for centuries been used at the Passover, and he passed it to each of the twelve disciples, saying, after he had given thanks, "Drink ye all of it for this is my blood of the covenant, which is poured out for many unto remission of sins. But I say unto you, I shall not drink henceforth of this fruit of the vine, until that day when I drink it new with you in my Father's kingdom" (Matt. 26:27-9). Hence, each time we partake

of the Christian holy communion and drink the sacramental wine, we join fellowship across twenty centuries with Jesus and the friends to whom he explained his sacrifice of love, in terms of shed blood and outpoured juice of the familiar Palestinian vine. Jesus always used close-at-hand scenes from the life of his people to incarnate his truths. Thereafter, his followers could never dissociate him from terraced vineyards, shepherded flocks, and productive fig orchards.

In using the supreme Parable of the Vine in that upper room of Jerusalem on Holy Thursday, Jesus, indeed, saved the best of the wine of his teaching till "the last of the feast."

OLD TESTAMENT LAWS OF THE VINEYARD

The Old Testament laws of the Holiness and the Deuteronomic Codes contained several items pertaining to viticulture. The first tenth of every vine's fruit belonged to God. "Thou shalt not glean thy vineyard, neither gather the fallen fruit of thy vineyard; thou shalt leave them for the poor and for the sojourner" (Lev. 19:10) was a companion law of the one commanding the farmer to leave the corners of his field unreaped for similar reasons. Here was an ancient prototype of the twentieth century A.D. "one per cent sales tax" to care for the unemployed.

Another very generous and quaint law was this: "When thou comest into thy neighbor's vineyard, then thou mayest eat of grapes thy fill at thine own pleasure; but thou shalt not put any in thy vessel" (Deut. 23:24). Enough to satisfy hunger and thirst but not wholesale looting was a sensible ruling.

A certain amount of tithed offerings of new wine brought to one of the holy places appointed by Jehovah might be drunk on that occasion. If the viticulturist lived too far from such a sanctuary, he was to turn his wine-offering tithe into money and spend it for new animals, wine, or food or whatever he desired, and eat it at home "before Jehovah thy God, and . . . rejoice" with his household. Even the Old Testament God of Israel had place for joy in His legal setup. In Syria today Christians

still celebrate the Feast of the Lord, bringing their first gleaned grapes to the Maronite churches.

Law forbade the Nazirite group of consecrated Jews to "drink any juice of grapes," or even to eat fresh grapes or dried ones. "All the days of his separation shall he eat nothing that is made of the grapevine, from the kernels even to the husk" (Num. 6:4). The Nazirites were forerunners of prohibitionists in Christian centuries.

Among the proverbs which King Lemuel learned from his mother is this wise adage—one of the many biblical exhortations to temperance:

It is not for kings to drink wine;
Nor for princes to say, Where is strong
drink?

This same great wisdom book admonishes,

Wine is a mocker, strong drink a brawler;
And whosoever erreth thereby is not wise.

VINES AND WORSHIP

In the curious fable of the trees, uttered by Jotham to the people of Shechem as he stood on the summit of Mount Gerizim in Samaria when Abimelech was king, "the trees said unto the vine, Come thou, and reign over us. And the vine said unto them. Should I leave my new wine, which cheereth God and man and go to wave over them?" This curious mention of the vine's ministry to Jehovah and to men sums up the role of the vine in life in Bible lands. One of the most famous temples of Syria was the Temple of Bacchus at Baalbek, where the grape-god was worshiped with cultic rites. And far earlier than the erection of this temple, the God of Israel was honored or "cheered" with the first yields of the laden grapevines. Bacchus, or Dionysos, the Greek god of the vine, was worshiped in elaborate festivals with goat songs and dancing. Such celebration led to the building of the earliest Greek theatre and establishment of Greek drama in the hillside Theatre of Dionysos at Athens (illus. 217), where we have seen the ancient dances re-enacted below the Acropolis.

The place of the vine in ancient social life in the Mediterranean lands which are the background for our Bible was usually on the side of bacchanalian overindulgence.

Devotees of the fruit of the vine sometimes had the vine and grapes carved on their pagan tombs, as we have seen in the Naples Museum.

VINES AS SYMBOLS

Vines were a symbol of prosperity among ancient Hebrews. Their prophets, such as Habakkuk, foretold times of invasion when vines would not fruit, or olives thrive, or flocks rest in their folds, or herds stand peacefully in their stalls at night.

Coins of the Maccabees, in the brief period of Jewish independence from Rome in the second century B.C., carry vines symbolic of restored Hebrew political power.

Flavius Josephus, in his *Antiquities of the Jews*, describes Herod's decorative use of a golden vine, whose branches hung down from a great height at the Jerusalem Temple doors, under the crown-work of the "interwoven pillars of the doors," adorned with embroidered veils.

Early Christian art carried down into Byzantine times the popular motif of grape-bearing vines, denoting the union of Christ with his living disciples. The design conveyed to the pagan observer the idea of the Christian Eucharist, even as the palm stood for victorious living, the peacock for immortality, and the fish or *ichthus* for "Jesus Christ, Son of God, Saviour." The authors of this book have, in their collection of crosses from many lands, an elegant English silver and topaz cross adorned with gracefully winding grapevines whose clusters attest the quality of fruit-bearing Christian effort.

EGYPTIAN VINTAGE, 1400 B.C.

From grape seeds found in ancient Egyptian tombs we learn that early Nile Valley folk engaged in viticulture. The finest recent account of how Egyptians managed their grape harvest appears on page 495 of the *National Geographic Magazine*, October, 1941, in a vivid painting by H. M. Herget, based on research in collaboration with William C. Hayes, of the Department of Egyptian Art of the Metropolitan Museum of Art. It shows

a royal scribe, Kha-em-het, attired in long, cool, white linen garments and shin guards, coming out with his small dog and walking-staff to watch the vine-workers pluck rich purple clusters from a trellis near his square, flat-roof white villa built along irrigation canals. The laborers include a bearded Semite from Lebanon, Negroes from Africa, and fair-skinned farmers from the north Mediterranean. Baskets of grapes are emptied into the wine press, which resembles a square box with walls of white clay. Juice flows into a smaller box below, as men in loincloths continue trampling over the slippery clusters, shouting and holding onto cords which dangle from a lattice over their heads. Immediately the juice is poured into huge, pointed pottery jars, which are corked and stamped with the name of the scribe and the date of the vintage. Then the jars are carried in nets slung across a pole carried by two men. Miniatures of similar scenes have been revealed in tombs of men such as the royal scribe of Amenhotep III, of the Eighteenth Dynasty.

But barley beer, not wine, was the popular drink of ancient Egypt. The royal brewery was next in importance to the bakery and the granary.

A glimpse of Egyptian vine culture appears in the Genesis story of the dream of Pharaoh's chief butler (40:9-13). Joseph interpreted this vision of a vine with three branches, budding, blossoming, and putting forth ripe clusters. The allusion to the butler's pressing the ripe grapes into Pharaoh's cup should not be taken literally. The phrase refers to the total process of cultivating the vine up to the point of pouring the beverage.

ITALIAN VINES

In Bible times and now, the Italian peninsula has held the Mediterranean record for grape production. The poet Virgil, writing in the first century B.C., just before the time of Paul's travels in Italy, wrote in his *Georgics* that it was impossible to be too particular in cultivation of the vine. The clods, he said, ought to be opened three or four times a year. When the autumn foliage has been shed,

said the farmer-poet, the husbandman should take "Saturn's crooked knife" and ruthlessly lop off unproductive twigs, pruning the vine into fit shape for the next year's crop.

Paul, traveling in Italy, saw much excess, due to the plentiful wine crop. His observations began at the Market of Ap-pius and the "Three Taverns," as he went from Puteoli harbor up the Appian Way to Rome. Most first-century Italian inns were the same sordid kind that he had encountered all through Asia Minor, Greece, Palestine, and Syria. His own attitude toward wine was characterized by the sound common sense he displayed in all matters. Writing from his Roman prison to his young friend Timothy, left in charge of Christian work at Ephesus, he urged him to avoid "youthful lusts" in favor of a career of "righteousness, faith, love, peace." Yet he advised him to avoid drinking water, usually contaminated in the squalid towns of Asia, and suggested the wisdom of using fruit juice or wine for his stomach's sake. All who travel in the Middle East today know the wisdom of keeping aloof from the usual water supply, even in Egypt, where Nile water chemically treated is served at table. Foreigners usually become ill during the first few days of their visit. Natives all around the Mediterranean recognize the medicinal value of green grapes for laxative and stomach tonics.

THE GLORY OF CORINTHIAN GRAPES

The mountainous, sunny peninsula of Greece has been from ancient times an ideal spot for cultivation of vines of many varieties. The luscious summer crop is peddled by neat little donkeys with scales

and Greek newspapers, in readiness for sidewalk business in Athens. Large clusters attract the eye at Marathon, near the historic battlefield which ran red with Greek and Persian blood in 490 B.C. Probably most famous are the grapes of Corinth, which many a time refreshed Paul, Prisca, and Aquila as they toiled at their tent-cloth looms in that isthmian city. We have risked everything in hot weather at Corinth, by eating unwashed but marvelously refreshing grapes offered us by Corinthian vine-growers because they loved America. But most famous of the varieties grown on the narrow isthmus among the mountains of central Greece are the tiny black grapes which make the Zante currants. These in times of normal commerce are shipped around the world for Christmas puddings and fancy cakes. There are no currants anywhere like the ones from the city to which Paul's two famous letters were addressed.

We gain some idea of the extent of Greek grape-growing in Bible times by the vast amount of pottery made for wine shipment to Black Sea ports and the whole Levant. Scarcely a dig excavated in Palestine, Syria, and Egypt is without wine pots from the mainland or the rocky islets of the Aegean Sea. Olive oil and wine production spurred on to its marvelous excellency the ceramics of the diligent Greek artist-craftsmen. We have already referred to the Rhodian wine jars. A wine jar was called an "oinochoe" when it was pitcher-shaped; a "crater" when it was wide-mouthed and used to mix wine with water; and an "amphora" when made with two handles and a mouth wide enough for a ladle to be inserted in this large storage type of jar. The "cylix" was a flat, stemmed vase lifted to the lips for a drinking cup.

ADDITIONAL BIBLE REFERENCES

"Noah began to be a husbandman, and planted a vineyard" (Gen. 9:20)

"Be ye of good courage, and bring of the

fruit of the land. Now the time was the time of the first-ripe grapes" (Num. 13:20)

"Let us get up early to the vineyards: Let us see whether the vine hath budded And its blossom is open"

(Song of Sol. 7:12)

"he [the king] will take . . . your vineyards" (I Sam. 8:14)

"They tread their winepresses, and suffer thirst" (Job 24:11)

"For ten acres of vineyard shall yield one bath" (Isa. 5:10)

"When the blossom is over, and the flower becometh a ripening grape, he will cut off the sprigs with pruning-hooks, and the spreading branches he will take away and cut down" (Isa. 18:5)

"No treader shall tread out wine in the presses; I have made the vintage shout to cease" (Isa. 16:10)

"Wherefore art thou red in thine apparel, and thy garments like him that treadeth in the wine-vat" (Isa. 63:2)

"They shall thoroughly glean the remnant

of Israel as a vine; turn again thy hand as a grape-gatherer into the baskets" (Jer. 6:9)

"They that dwell under his shadow shall return; they shall . . . blossom as the vine: the scent thereof shall be as the wine of Lebanon" (Hos. 14:7)

"I found Israel like grapes in the wilderness" (Hos. 9:10)

"The vats shall overflow with new wine and oil" (Joel 2:24)

"I am as when they have gathered the summer fruits, as the grape gleanings of the vintage: there is no cluster to eat" (Mic. 7:1)

"The fathers have eaten sour grapes, and the children's teeth are on edge" (Ezek. 18:2)

BIBLIOGRAPHY

- De Haas, Joseph, *History of Palestine*, The Macmillan Company, New York.
 Flavius, Josephus, *The Antiquities of the Jews*, John C. Winston Company, Philadelphia.
 Hayes, W. C., and Herget, H. M., article and pictures, *National Geographic Magazine*, October, 1941, Washington.
 Hussman, George C., "Viticulture," *Encyclopædia Britannica*, 1941.
 Macalister, R. A. S., *A Century of Excavation in Palestine*, Fleming H. Revell Company, New York.
 Matthews, Basil, *The World in Which Jesus Lived*, Oxford University Press, Oxford.
 Pfeiffer, Robert H., *Introduction to the Old Testament*, Harper & Brothers, New York.
 Post, G. E., "Vine," *Hastings' Dictionary of the Bible*, Charles Scribner's Sons, New York.
 Thompson, W. M., *The Land and the Book*, Harper & Brothers, New York.
 Van Lennep, Henry J., *Bible Lands*, Harper & Brothers, New York.

WATER SUPPLY

Whosoever shall give to drink unto one of these little ones a cup of cold water only, in the name of a disciple, verily I say unto you he shall in no wise lose his reward.

—Matt. 10:42

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INTRODUCTION

JEHOVAH AND ISRAEL'S WATER SUPPLY

The author of Deuteronomy shows an Israel aware of Jehovah as loving giver of the rain upon which the crops of a developing sedentary people depend. During their nomadic days, rain upon their tents or drought upon their paths was less vital than when they occupied fields and began to sow. The author of the fifth book of the Bible warns Israel not to turn aside after the "weather gods"; these were the Baalim of springs and rivers, honored in Syria and Canaan even as Oreads, Nymphs, Nereids, Naiads and other offspring of watery Neptune and Pontus, along with thunderbolt-wielding Zeus, were worshiped

later by Greeks and Romans. Canaan was not going to be like rainless Egypt, whose fertility came from dependable Nile inundations which deposited rich silt, and from a canal system whose network of channels and basins separated by ridges of mud could be controlled by the foot of a man breaking down those ridges or by the *shadûf*, or water pump.

The record of Deut. 11 is the only picture we have of Hebrews pursuing agriculture in Egypt: "thou sowest thy seed, and wateredst it with thy foot, as a garden of herbs." But, the Deuteronomy record points out, the "land whither ye go over to possess it is a land of hills and valleys, and drinketh water of the rain of heaven, a land which Jehovah thy God careth for: the eyes of Jehovah thy God are always upon it, from the beginning of the year

even unto the end of the year" (11:11, 12). Seasons of rainfall and storage of that rainfall explain why Hebrews were able to farm as well as they did the rugged highlands and few level plains of their inheritance. They early regarded Jehovah as one who directed watercourses as He did the hearts of men (Prov. 21:1).

The Jewish farmerette from Poland shown in illustration 223 on the Plain of Esdraelon is engaging in small-scale irrigation, such as the author of Deuteronomy means when he speaks of the "foot-watered" herb garden.

The first book of the Bible gives us an accurate picture of an eastern pleasure garden, properly irrigated: "God planted a garden eastward, in Eden. . . . And a river went out of Eden to water the garden; and from thence it parted, and became four heads." These rivers were the Pishon, the Gihon, the Hiddekel (Tigris), and the Euphrates. Whatever the historical or theological deficiencies of Genesis may be, the book gives a true picture of the fertility of the fruit-tree-producing land "between the rivers." That region throughout millenniums exerted a profound influence upon the lives of the people to whom we are indebted for the record of our Christian faith. The Babylonian Deluge story exists today on clay cuneiform tablets.

Gardens of fountain-refreshed fruit and flowers have been for 4,000 years the dream of every man in Bible lands. The last chapter of the Bible features "a river of water of life, bright as crystal, proceeding out of the throne of God and of the Lamb. . . . And on this side of the river and on that was the tree of life, bearing twelve manner of fruits." A Mesopotamian garden begins and ends the record of God's biblical message to man. The river of baptism into His Kingdom flows through the midst of the Gospels.

Nearly every tell, or mound, of Palestine stands beside a well.

Most of the city sites in the Bible were selected because of their proximity to water. The spring at Jericho, now known as "Elisha's Fountain," was so valuable that before Hebrew times a fort was built to protect it. Ruins of what appears to be Amorite construction of huge polygonal stone blocks used in the Bronze Age have

been discovered here. The several rectangular chambers of this fortification have walls 5 or 6 ft. thick. Some of the ancient tanks which supplied water to Jericho may still be seen near the town. One measures six acres. Its conduits contributed largely to the fruited oasis. Ai had a less favorable water provision. But Beth-el with its rich and long biblical history has copious springs even to this day. No wonder ancient people said, "Where there is a spring, there let us build an altar." Jesus, in phrasing his conversation with the woman of Samaria at Sychar well curb, made use of her own knowledge of the preciousness of pure water; thence he led her to the "well of water springing up unto eternal life" (John 4:14). No wonder she implored, "Sir, give me this water, that I thirst not, neither come all the way hither to draw."

Water was an important part of all hospitality in Bible lands. Abram, tenting under the oaks of Mamre near Hebron, offered his three angelic visitors, first of all, a little water to refresh their weary feet. This custom continued into New Testament times, when Jesus at the last supper took basin and towel and washed the disciples' feet as a symbol of his role as Servant-Master.

Jeremiah describes effectively what happens in Bible lands when water supply fails: "Their nobles send their little ones to the waters: they come to the cisterns, and find no water; they return with their vessels empty . . . the ground . . . is cracked, for that no rain hath been in the land, the plowmen are put to shame . . . wild asses stand on bare heights, they pant for air" (Jer. 14:3-6).

THE WATER SUPPLY OF WANDERERS

WILDERNESS WELLS

The crowd of families and flocks led by Moses from Egypt to the brink of the Promised Land became acutely water-conscious. When the bitter waters of Marah along the Red Sea failed to quench desert thirst, fainting bodies had to wait until they came presently to the oasis of Elim, perhaps a short distance south of

Marah. At Elim "were twelve springs of water and threescore and ten palm-trees: and they encamped there by the waters" (Ex. 15:27). Time and again in Egypt and along the coast of North Africa we have seen just such groups of nomads luxuriating in palm-tree oases beside abundant wells. General Allenby, advancing to "Canaan" from Egypt in 1917, solved the water supply of his army by laying pipe lines which carried water alongside his troops.

Moses had learned something of desert wells while hiding as a fugitive and tending flocks of Jethro in Midian. He had gallantly helped daughters of the priest of Midian, when the girls came to water their flocks at one of these wells—an acquaintance which provided Moses with his wife Zipporah (Ex. 2:16-22). His familiarity with ways of underground waterways may have had something to do with the results he secured by smiting rocks at Rephidim (Ex. 17) and at Meribah (Num. 20). When casual springs failed to appear, as Major Jarvis in *Yesterday and Today in Sinai* suggests, Moses struck off the weathered facing and made it possible for water to flow through the porous limestone. Jarvis himself saw such phenomena when he was Governor of Sinai.

The bitter waters of Marah's wells, which they could not drink, were probably saline from proximity to the Gulf of Suez. But the sweet waters of the twelve springs at Elim, in a delightful oasis shaded and fed by seventy palms just south of Marah, were a satisfaction never erased from the racial memory of Israel.

Because there was no free water available, Moses offered to buy a supply for his wanderers in the border-town of Kadesh, controlled by the King of Edom. Promising not to dally inside this ruler's borders, Moses said, "We will go up by the highway; and if we drink of thy water, I and my cattle, then will I give the price thereof." But Edom refused (Num. 20), and the nomads selected another route.

Then, after the Israelites had left Kadesh and were passing through the borders of Esau in Seir or Edom, Moses was ready to "buy water of them for money" (Deut. 2:6). Again, to Sihon, Transjordan king of Heshbon, Moses said, "give me water

for money, that I may drink" (Deut. 2:28).

It was out of a sense of dependence upon desert wells that the journeying Hebrews burst forth into singing songs of rejoicing when they came upon fresh wells. For a Song of the Well, see page 426.

WATERS OF TRANSJORDAN

Nelson Glueck, exploring for the American Schools of Oriental Research of which he is the Director in Jerusalem, has made us aware of water conditions in Transjordan where Israel wandered and achieved its first conquests after the Exodus from Egypt. What this eminent American scholar has surveyed gives fresh authority to such statements as Deuteronomy's, "Jehovah thy God bringeth thee into a good land, a land of brooks of water, of fountains and springs, flowing forth in valleys and hills . . . wherein thou shalt eat bread without scarceness" (Deut. 8:7-9). A good Transjordan spring today will irrigate 6,000 dunams of land and bring wheat 8 in. high by February, says Glueck. Eastern Palestine, encouraged by grants from England, furnishes thousands of tons of wheat per year to the land west of the Jordan and could do more with resurrected systems of irrigation from ancient times and introduction of new ones. Genesis, written later than we have formerly thought, is accurate when it says, "Lot lifted up his eyes, and beheld all the Plain of the Jordan, that it was well watered everywhere . . . like the garden of Jehovah, like the land of Egypt."

Perhaps the location of Pella, one of the ten Greek cities east of Jordan, was determined by copious springs bursting from highlands above the green valley of the Jordan southeast of Beth-shan. Glueck found its 100 inhabitants a sorry survival of the once haughty center of culture looking across into the fertile Valley of Jezreel, with its own rich plain below it. Many of the hearers of Jesus came from Pella and sister cities east of the Jordan, as Matthew narrates (4:25). Jesus himself may have halted at the springs of Pella, when he was making a wide preaching tour all the way from Tyre and Sidon on the Mediterranean, across the Sea of Galilee

and "through the midst of borders of Decapolis" (Mark 7:31). This north portion of the east slope of the Jordan Valley, with its abundant water, could again use the Jordan for irrigation of the section surrounding Pella—the most likely soil east or west of Jordan for future productiveness now, as it was in the times of Jesus.

As Glueck points out in *The Other Side of the Jordan*, the location of sites for mining copper and iron in highlands of Transjordan during the Hebrew monarchy and for centuries later was determined by water supply as well as by presence of ore. Wadies, or little gorges, with downrushing torrents at certain seasons, and rock-cut wells were essential for workers in all the mining settlements, as at Feinan, where the excellent water supply played a part in the large-scale smelting activity of this copper-mining center of Umm el-Amad. Solomon's factory town and seaport at Ezion-geber had trouble getting water which was not saline. Wells near the Red Sea were as unpalatable as those too near the Mediterranean. Some ancient copper mines were worked only in the winter and early spring rainy seasons, for the large staff of workers, slave and free, demanded a reasonable supply of potable water. In Sinai, expeditions to mine the coveted turquoise stones were sent out each spring when water was available. Glueck found a record of forty-three peasants assigned to 500 donkeys; this staff kept a substantial amount of food and water flowing to the Sinai miners. Water was carried in skins or pottery jars. Women of remote Palestinian villages still carry water in goatskin bags uphill from springs as they were doing 3,500 years ago.

At Qasr Hallabat, northeast of Mafraq, just south of the Syrian border, and east of Gilead in Transjordan, which as a headquarters point during the construction of the modern Iraq Petroleum Line, a huge empty reservoir and several cisterns have turned up. Such equipment explains how a sedentary population lived in this arid section. Farther south at Ziza, Glueck found a large reservoir (possibly Roman) which becomes full during the rainy season and supplies today, through the reconstruction work of the Transjordan government, a police station, a village, shep-

herds, and passers-by. Such cleaning out of old cisterns would vastly improve life in rich Transjordan of the Emir.

Glueck considers one of the most unusual things he observed an underground reservoir more than 900 ft. long, 30 ft. high, and 12 ft. wide, fed by hill springs and running out through an underground canal which in Roman times carried fresh water to another reservoir in the village. This whole abandoned system could again be turned to service, as could the wonderful spring of 'Ain Abdch, where three copious gushings leap into a cave and form a natural reservoir. Glueck found one man of Transjordan playing a miniature Solomonic role: he used an excellent spring out of a steep valley in a clean cave to water his extensive fruit gardens. The cave spring runs into a little reservoir and then into irrigation ditches to nurture pomegranate orchards.

We cannot dismiss even this brief consideration of the water supply of eastern Palestine without referring to the resourcefulness of the people of the famous rock-cut rose city of Petra. Here Nabataeans flourished just before and just after the beginning of the Christian era, and here Romans seized its strategic hold on ancient caravan routes for their astute commercial projects. As Margaret Murray points out in her *Petra*, the Nabataeans found that the springs of Petra valley were inadequate to refresh their large population. Springs were constant but not generous enough. To conserve the 'Ain Musa springs, they not only brought water inside the valley by conduits conducting it to cisterns for storage, but prevented calamity from heavy rains by digging a tunnel through their weird gorge to lead away the surplus rain into cisterns. Their whole engineering for the water project reveals the work of a genius, with knowledge of rock-cutting and of managing abnormal water conditions. Glueck describes (*The Other Side of the Jordan*, p. 168) how Nabataeans of the rock-cut village of Sela used most of their hill for catchment and storage-cistern basins; they also dug down through a solid limestone cone-shaped "outcrop" at the top of their stone hill to make a natural shaft for storing water—certainly a most original idea.

STREAMS AS NATURAL SOURCES

PALESTINE'S RIVERS

The downrushing, twisting Jordan, forming the boundary between Palestine and Transjordan, runs a weird course from its sources north of the Lake of Huleh into the Dead Sea. It is useful for watering level spaces in certain of its reaches, as at wide Jericho Plain, but it is not valuable for navigation. Dropping down the lowest ditch in the world, the Jordan receives such tributaries as the powerful Yarmuk, the Ajun, the Jabbok, and others from highlands of eastern Palestine. Associated with three great scenes in Old and New Testament history—the crossing of Israel into Canaan, the ascension of Elijah, and the baptism of Jesus, the Jordan gives personality to the whole of this dry little land. It is the fluid backbone of Palestine.

For the two best recent accounts of the Jordan, which plays such a conspicuous role in the spiritual life and the physical topography of Palestine, consult *Down the Jordan in a Canoe*, by the Rev. R. J. E. Boggis; and for another angle of this same canoe trip read "Canoeing Down the Jordan," by John D. Whiting, in the *National Geographic Magazine*, December, 1940. See, also, Ornithology, page 326. And for more detail about the Jordan, see Geography, page 225f.

The River Kishon, which figured prominently for its flood contribution in the battle of Deborah and Sisera, waters the rich Plain of Esdraelon in an inadequate manner, drying up almost entirely in summer with scarcely any contribution to the Mediterranean at the Bay of Acre. The *Nahr Jalud* waters the equally fertile Valley of Jezreel and makes its way down into the Jordan below Beth-shan.

TRANSJORDAN'S STREAMS

Compared with the arid highlands of Judaea, Transjordan is an excellently watered area. It is supplied not only by the Jordan itself but by several perennial tributaries. The powerful Yarmuk yields power for the Palestine Electric Corporation, whose artificial lake and headrace canal at Jisr el-Majami in Transjordan help

to light Palestine and to turn its wheels of energy. Extremely important is the lock controlling the flow of water from the Sea of Galilee into the Jordan, as part of this Silas Rutenberg project. The River Jabbok, which formed the Old Testament frontier between Ammon and Gilead, and which was the scene of the Jacob and Esau meeting (Gen. 32) today beautifies the rugged landscape with its deep, stony gorge of the grey-blue Wadi Zerka (illus. 129). A little branch of the Jabbok, the *Chrysorroas*, helps explain the location of the great Decapolis city of Jerash.

Numerous wadies, such as the oleander-lined *Nimrin*, retain even in summer, sufficient water to refresh flocks of sheep, as we have seen on our way down from Amman to the Jordan at Allenby Bridge. The *Wadi Zerqa Ma'in* near Madeba blesses its environs with warm sulphur springs and tropical vegetation. Streams flowing from Samaria and Judaea into the Jordan from the west are not comparable with those of Transjordan. Even the faint summer trickle and waterfall of *Wadi el-Kelt*, sustaining palms and gardens of the rock-perched Convent of Elijah in the midst of the wilderness, is meager compared with eastern Palestine's wadies in Gilead and Ammon.

The Old Testament reflects the well-watered condition of this country through which the Hebrews came from Egypt en route to Canaan. The springs of Mount Pisgah are mentioned in Deut. 3:17, on the slope above the north end of the Dead Sea. The Arnon River, flowing into the Dead Sea from Moab, was successfully crossed during Israel's conquest of Heshbon and cities as far north as Gilead: "there was not a city too high for us," runs the Deuteronomic record of conquest. The rivers Jabbok and Jordan, as well as the Dead Sea, the springs of Pisgah, and the trenches of the 'Arabah, were boundaries marking the possessions of the tribes of Manasseh, Reuben, Gad, and Machir, son of Manasseh.

RIVERS OF SYRIA

Rivers play a large part in the fertility of Syria, a productive land which sneers at its lowly neighbor, Palestine. The deep

gorge of the Qadisha carries water from the high Lebanons to enter the Mediterranean among the gardens of Tripoli, a port first built by Phoenicians. Its steep banks are meticulously terraced by Lebanese Christian farmers, whose wives we have seen patiently cutting wisps of summer grain with hand sickles (illus. 5). The down-rushing valley of the River Barada (the ancients' Abana) refreshes us today with its luxurious greenery, in contrast to the parched desert (illus. 232). It runs on to water the famous gardens of Damascus, making them a fruited oasis on the edge of the Syrian Desert. The Barada in several channels runs hither and yon through the city founded before the time of Abraham, who saw her canals reminding him of Sumerian irrigation in his old home at Mesopotamian Ur.

Syrian waters, too, claim the source of the Jordan, under the slopes of Mount Hermon in the Spring of Banias. It bursts with energy from a cave in a cliff of red limestone near the town of Caesarea Philippi, where Jesus drew from Peter his great confession, "Thou art the Christ, son of the living God." (For Banias, see *Geography*, p. 226.) The Banias has what George Adam Smith calls the "most impressive origin" of the four streams which contest the honor of being the source of the Jordan; all four blend harmoniously to form that sacred and weird stream north of the Waters of Merom, Lake Huleh.

The great Syrian River Leontes (Litani) winds out of the Beka'a Plain between the Lebanons and the Anti-Lebanons and enters the Mediterranean between Tyre and Zarephath, where Jesus ministered once to the daughter of a Syro-Phoenician or Canaanite woman. The Orontes River, rising east of the Syrian city of Homs, flows through the green valley between Aleppo and Lattaqieh to enter the sea beyond Antioch. Fed by Lebanese streams, it allowed itself to be efficiently used by the Roman administration of Coele-Syria to produce great crops of grain and fruit for a dense population. It also watered the notorious pleasure gardens which flourished near Antioch in Bible times.

At Hama on the Orontes today there still operate four old water wheels, one of which is said to be the oldest in the world.

It is 70 ft. in diameter, made of wood on a wooden axle. It creaks night and day in rhythm with the emptying of its water buckets into the arched aqueduct which irrigates the thirsty fields of this section, 120 miles north of Damascus, on the main highway linking that capital with Homs and Aleppo. "Hama the Great," as Amos called it, is picturesque among its gardens and keeps itself busy weaving the most noted garment of the Middle East through the centuries, the seamless mantle, or *abayeh*. We can understand why such a well-watered center on plains should have a reputation for breeding fine horses. Is there any connection between Solomon's building a city at Hamath (Hama) and his interest in large-scale horse breeding for his chariot cities? The record of II Chron. 8:1-6 offers interesting speculation in this matter. Of the numerous Bible references to Hama, this is one of the most engaging. The story is continued in II Kings 14:28: "Now the rest of the acts of Jeroboam, and all that he did and his might, how he warred, and how he recovered Damascus, the Hamath, which had belonged to Judah, for Israel . . ."

"THE RIVER OF EGYPT" AND "THE RIVER"

Strangely enough, what ancients called "the River of Egypt" was not the mighty Nile, to which the land owes its life but a tiny stream near the border of present Palestine and Egypt, the *Wadi el-Arish*. In our several crossings of its inconspicuous trickle on the way down from Jerusalem to El Kantara, we have thought of the many occasions in Israel's history when this "brook of Egypt," with its "goings out" at the sea, served as boundary, from the days of the conquest of Canaan (Num. 34:5) to the calling of Solomon's assembly (I Kings 8:65). When people in Bible times referred to the Nile, they called it simply "the River": the mother of Moses laid the child in a papyrus boatlet "by the river's brink" (Ex. 2:3); and, on the eve of the Hebrews' Exodus from Egypt, at the smiting of the waters by Moses' rod, "the waters that were in the river were turned to blood. And the fish that were in the river died" (Ex. 7:20,

21). At that crisis, "all the Egyptians digged round about the river for water to drink" (Ex. 7:24).

The 4,000-mile waterway was christened by Greeks and Romans the "Nilus," a name surviving today among Arabs who know it as "En-Nil." For the part played in agriculture by this natural water supply, see Irrigation, page 4.

Unlike the impractical Jordan, the Nile is navigable at high water from the Mediterranean inland for 2,900 miles and for 4,000 miles by small local craft. For some of its boats today, see illustration 207. The Nile with its life-bringing inundations has created rich history for millenniums. In fact, Egypt is the "gift of the Nile,"—a phrase first used by Hecataeus and quoted by Herodotus. With its two branches flowing out from lakes of equatorial Africa and snow-crowned mountains of Abyssinia, the Nile has always fed Egyptian life.

"THE GREAT RIVER"

The Tigris-Euphrates was equally creative in the life of the people who developed great culture along the banks of this twin system at a date incredibly early in comparison with that of other countries. Bible writers time and again referred to "the great river, the river Euphrates" (Josh. 1:4ff.). There are many more references to the Euphrates than to the Nile in Scripture, because of the residence of exiled Jews at Babylon on this waterway. The Chebar River was another Babylonian stream mentioned in Scripture; Ezekiel wrote of sitting by this channel (the Nahr Kabari, flowing southeast from the Euphrates at Babylon) in the fifth year of Jehoiakin's captivity (Ezek. 1:1f.).

The Tigris, called "the Rapid," and, in Gen. 2:14, "Hiddekel," begins its 1,146-mile course in the mountains of Assyria and rushes with cumulative force to its junction with the Euphrates. Too swift to be serviceable for irrigation in many miles of its descent, it has always been navigable from Diarbekr south. The Euphrates, called in the Bible "the Great River," is the western of the twin waterways. For many of its 1,780 miles it is not suited to shipping because of cataracts in the north and sand banks in its southern reaches, as indicated

by Morris Jastrow, Jr., in *The Civilization of Babylonia and Assyria*. However, the Euphrates, with its oft-sluggish flow, and its majestic calm permitting crossings by rafts and small wicker basket-boats daubed with bitumen inside and out, invited settled occupation on the rich lowlands of Babylonia which lent themselves admirably to irrigation. Here cereals seem first to have been cultivated and to have spread to bless surrounding nations. The richness of Babylonian soil, due to overflow of rivers in the long rainy season from November through March or April, led to an early, quick, and rich culture built in mud which literally and figuratively melted too soon away. In contrast, the stone-built structures of Egyptian civilization, unwatered by rains but fed by the Nile, endured long.

The opening chapters of Genesis give a characteristic picture of what happens in a season of extremely heavy rain in the Tigris-Euphrates Valley. On that occasion, it seemed as if the whole world were deluged and as if nothing but the hand of the Creator could again separate water from land. After the waters receded, however, and the sun shone again in this hot climate, came the planting of gardens. "God made a wind to pass over the earth, and the waters assuaged; the fountains also of the deep and the windows of heaven were stopped . . . and the waters returned from off the earth continually." Promptly Noah, prototype of Babylonian farmer, "began to be a husbandman and planted a vineyard" (Gen. 9:20). Could the mountains in the story be the peaks of Mount Ararat in Armenia?

It seems but a step from the Genesis picture of receding Babylonian flood waters to the sprouting of Sumerian agricultural life and city dwelling at Babel, Erech, Accad, and Calneh, in the land of Shinar (Gen. 10:10). Archaeology supplies some historic background for Gen. 10.

SPRINGS AND FOUNTAINS

IN PALESTINE

"All my fountains are in thee," writes the Psalmist (87:7). Gushing fountains spring up all over Palestine and Lebanon.

Many of them blend to form the sources of principal rivers. They illustrate God's promise to Israel, recorded in Deut. 8:7, that He would bring them into a land not only of water-brooks but of fountains and springs flowing in valleys and hills.

It is interesting that several of the cities occupied by thirsty Israel after wanderings in barren wilderness areas had the word, *en* or *'ain*, meaning "spring," attached to their name. The writer of the Book of Joshua is quite water-conscious. Describing the portion assigned to the tribe of Judah, he mentions borders at the Jordan and at En-shemesh (meaning "spring of the sun"), and at En-rogel (meaning "spring of the courtyard"). En-gannim (possibly modern Jenin) is mentioned in Josh. 15:34. It means "garden spring." The En-ge-di, listed in Josh. 15:62 as assigned to Judah, means "spring of the kid." The En-mishpat of Gen. 14:7 suggested as Kadesh means "spring of decision."

One of the most interesting springs in Palestine is the one at Jericho, which we have already mentioned. It comes from the base of Judaeen Wilderness mountains behind the town, first important city conquered by Israel after the Jordan crossing. Today it contributes to Elisha's Fountain, a pool seen across the road from the excavated mound of Jericho. It appears at low level in summer but never completely dries up. It waters the oasis of banana, fig, and date-palm trees seen in illustration 123 and helps Jericho to have what George Adam Smith called "one continual summer." Josephus identified this pool as the one "healed" by the prophet Elisha when "men of the city said unto [him], Behold, we pray thee, the situation of this city is pleasant, as my lord seeth; but the water is bad, and the land miscarrieth. And he said, Bring me a new cruse and put salt therein . . . And he cast it into the spring of waters. . . . So the waters were healed unto this day" (II Kings 2:19-22). Our oasis picture gives evidence of its centuries of service.

Another notable set of Palestinian springs was given to Achsah, daughter of Caleb, when she married Othniel and asked of her father a wedding gift including not only a field in southern Judaea but

also "the upper and the nether springs" (Josh. 15:19). Achsah was a wise bride, choosing land and water as two most precious dowries.

Hot springs in the wilderness were discovered by Anah, a Horite (Gen. 36:24).

One of the strangest springs we have ever seen in Bible lands rises from the heart of a giant cedar at Bsherrch in the Lebanons, at a point where several waterfalls leap down into the gorge of the Qadisha Valley. How it "works" we do not know. But it seems an uncanny fulfillment of Ps. 104:16:

The trees of Jehovah are filled with moisture,
The cedars of Lebanon which he hath planted.

The melting snows of the higher Lebanons probably feed a subterranean channel which bubbles up inside a hollow trunk.

Especially famous are the fountains feeding the Dog River, or Nahr el-Kelb, in its strategic mountain pass; the River of Beirut; and the Litani River rising near Baalbek. To the springs at Ras-el-'Ain near Tyre we refer on page 424. And from the springs of the Auja River the modern water supply of Jerusalem is drawn. Near Caesarea on the sea are the Zerka fountains. The reluctant River Kishon is generously fed at times by springs near Jenin and Lcjjun. The Heptapegon or Seven Springs near the great fishing grounds of Tabgha on Galilee are notable. From them a water tower probably pumped the supply for Roman baths which were near here in Jesus' time. The Basilica of the Multiplying, to which we refer on page 320, has among its floor mosaics from the fourth or fifth century A.D. a conical structure which seems a water tower, with Greek letters indicating heights after the manner of a Nilometer (see page 5).

These wellings-up of water from the subsoil are characteristic of Palestine with its limestone ribs. Psalmists were aware of them when they wrote that Jehovah opens cocks and waters rush out into dry places like a river; or, again, that Jehovah sends springs into dry valleys, so that they run among mountains, furnishing drink for beasts of the field, for wild asses, for birds that sing among the trees. Jehovah watered

mountains from his chambers and caused grass to grow for cattle, herbs for men, vines for joy, and oil for fatness.

Cave springs, whether natural or dug out through the centuries, tended to become sacred sites. In every solemnity they gave forth an element essential to life. Pagan and Christian sects revered many a gushing spring, as the one at Banias. At Corinth on the Greek isthmus familiar to Paul, springs of great fame issued from caves and the mountain side above the city (see p. 433).

PUBLIC FOUNTAINS

Illustration 233 gives an accurate idea of how the average village in Bible lands today depends upon the public fountain or well for its daily water. Many families live at great distances and suffer hardship, especially severe on the women and girls, who "tote" water jars on their heads. Men sometimes carry water, but this lowly task is ordinarily left to the women. In times of drought, whole villages become temporarily nomadic and move on to the nearest available water source. One summer, just before the completion of Jerusalem's new water supply, we looked from our windows and saw a whole clan encamped with their animals under a group of olive trees along the main highway from Nablus which leads straight to the heart of Jerusalem at Damascus Gate. Similar groups were encamped among the Moslem tombs just outside the east wall of Jerusalem. Such victims of water shortage menace the health of the capital. Public fountains in streets are still the only water supply of many towns in Asia Minor and Greece.

John Garstang, in *The Heritage of Solomon*, cites a large-scale example of nomadic thrust from northern Arabia and the Hejaz into Syria, Transjordan, and the Beersheba section of Palestine. Rains had for several years been less than their customary fall. The herbage, which should have lasted into summer, had already been consumed, and ground usually fertile became a desert of twigs and dried-up springs. As a result, a vast throng of thirsty, hungry humanity began to trek north, threatening the organized life of Syria. The movement, says Garstang, was of his-

toric interest, for it enables us to see how Semitic nomads made their way into Palestine at the beginning of tribal thrusts recorded in the Bible.

CISTERNs, AQUEDUCTS, RESERVOIRS

Reservoirs for storing water, called "cisterns," have been used in Palestine for more than 4,000 years. Cave dwellers, in fact, were using cisterns long before that. To be able to drink water from the family cisterns was a proverbial desire of every Jew, and one of the tempting promises offered by King Sennacherib of Assyria as a condition of maintaining peace with him (II Kings 18:31 and Isa. 36:16). A consistent gift was this, offered by the Assyrian king who at home had built the first aqueduct in the ancient East, so far as we now know, to water his own gardens at Nineveh. Ecclesiastes also refers to "the wheel broken at the cistern" (12:6); we thus infer that pumps drew up the water by a manipulated wheel. This same book makes the following comment on water systems in Bible lands: "I made me gardens and parks . . . and I planted trees in them of all kinds of fruit. I made me pools of water to water therefrom the forest where trees were reared" (Eccles. 2:4-6). The Hebrew King Uzziah (780-740 B.C.) "hewed out many cisterns, for he had much cattle; in the lowland also, and in the plain" (II Chron. 26:10). And in the Roman construction of Herod's city of Samaria, an elaborate system of arched aqueducts brought water up to the highland capital from near en-Naqura, Sebastieh's present-day supply source.

SOLOMON'S POOLS

Solomon did not need all his wisdom to realize that his capital at Jerusalem lacked such river frontage as Thebes had on the Nile, Nineveh on the Tigris, and Babylon on the Euphrates. With rainfall amounting to only 600 millimeters per year, Solomon and his engineer-advisers in the tenth century B.C. devised a system of enormous cisterns and stone-lined reservoirs three kilometers west of the road

from Jerusalem to Hebron, near the junction of this track with the road to Bethlehem. We have seen these Pools of Solomon, heralded by fig orchards and terraced gardens on a 400-ft. elevation from which the water flowed to Jerusalem. One of the pools is 582 ft. long, 207 ft. wide, and 50 ft. deep. The other two are 308 ft. and 248 ft. long, respectively. These reservoirs were used until Roman times, when they were repaired by Pontius Pilate. His conduit consisted of squared sections of solid stone, each of which had a circular opening at its center, so that they formed a pipe when joined. Two of the sections of Pilate's conduit are seen in illustration 227, Wise Men's Well. The sheep are drinking from the one forming the well curb at left; the one at right is what natives call "the cup running over," as in the twenty-third Psalm, for good shepherds dip up into that more shallow vessel water for the convenience of the flocks. Every time we halt at the traditional Well of the Wise Men who brought their gifts to the infant Christ at Bethlehem, we think of the ironical condition of the well today: its curbs are from the aqueduct of Pontius Pilate, under whom Jesus suffered, as we state every time we repeat the Apostles' Creed. Herod brought water to Jerusalem from reservoirs six miles away.

Turks in 1902 repaired again Jerusalem's ancient water system by laying a 4-in. pipe line. Today the reservoirs and system of Solomon still play a part in the supply for the modern city. For when in 1917 General Allenby swept up from Egypt to deliver the Holy City from 400 years of Turkish misrule, he connected Solomon's Pools with the springs of El-Arrub and installed waterworks which bring an aqueduct forty miles into Jerusalem.

This same cistern system and its springs are near the traditional site of Solomon's pleasure garden immortalized in the Song of Solomon. From a dark chamber approached by a flight of twenty steps, the "Sealed Fountain" waters a rich garden land of Artas, possibly the biblical Etam. This fountain plays a vital part in the constant water supply of Jerusalem.

The garden of the Song of Solomon is described (4:15) as

. . . a fountain of gardens,
A well of living waters,
And flowing streams from Lebanon.

It seems to fit better the location of Ras-el-Ain near Tyre. There we have seen, on a fertile farm, water conduits and springs which make vivid the tradition that Solomon constructed for King Hiram of Tyre a water supply for his great port, out of gratitude for Hiram's cooperation in supplying cedar for the Jerusalem Temple. Some stone reservoirs at Ras-el-Ain (Fountain Head) are certainly ancient. In view of the excellency of Phoenician stonemasons, we wonder why Hiram did not have his own men make such a reservoir and aqueduct for his key city of Tyre. Less perplexing is the joyful labor at this scene of modern farmers whose abundant water supply explains their good crops. Copious springs at another fountainhead (Ras-el-Ein), headwaters of the Auja River east of Jaffa and modern Tel Aviv, are the source of the new Jerusalem water supply, pumped thirty miles up Judean highlands to the plateau of the capital. This boon was awaited during centuries of a relatively waterless existence in the Holy City. Ras-el-Ein was the site of Antipatris, to which Paul was escorted by 200 footguards who here turned back to Jerusalem, allowing their prisoner to proceed to Caesarea attended by only seventy horsemen. Several pumping stations lift to successive elevations in highlands the water which increases Jerusalem's supply from 700,000 gal. to more than 3,000,000 gal. daily. Citizens buy it by the cubic yard, thus helping to liquidate the British loan of several hundred thousand pounds for construction.

Illustration 229 shows some of the new pipes on the road up to Jerusalem, waiting to be set underground. The structure at left is a small white stone shrine of a Moslem holy man, who endowed a tiny spring here and ordered a small vessel to be kept on the shelf in the niche, that every passer-by might have "a cup of cold water" in his name. Had he heard the injunction of his fellow-Palestinian nineteen centuries before, "And whosoever shall give to drink unto one of these little ones

a cup of cold water only, in the name of a disciple, verily I say unto you, he shall in no wise lose his reward" (Matt. 10:42)?

TEMPLE RESERVOIRS

Since a tremendous amount of water was needed for worship rites in the Temple at Jerusalem, the sacred Area was paved with stone enabling rain water to flow into cisterns below the enclosure. Millions of gallons were thus provided, in vaults or tanks, some of which have been cleaned and cement-lined in modern times. It has been suggested that the Nicodemus, a "ruler of the Jews," who came to interview Jesus (John 3) may be the Nicodemus ben Gordon of the Talmud, who had charge of the Temple water supply.

One of the cisterns honeycombing the Temple Area is under the fountain El Kas ("The Cup"), between the Dome of the Rock and the Mosque el Aksa. Water flowed into this fountain from the Sealed Fountain near Solomon's Pools, which also supplied under El Kas vast reservoirs, approached by underground steps. The region below the Temple Area has many interesting features, including the columned "Stables of Solomon" at the south-east end. El Kas is still used for ablutions of Moslems. See illus. 226.

Most vital to the life of the old city was the Temple Area's "Great Sea," an underground water supply of perhaps 20,000,000 gal., if we accept the picturesque figure of Arabs today in this Place of the Noble Sanctuary.

We glean from Ezra 10:9 an indication of the winter rainfall at Jerusalem's Temple, for he tells of an occasion when the people of Judah and of Benjamin sat in the broad place before the house of God, trembling because of Ezra's command to abandon mixed marriages and because of "the great rain." Dreary winter weather, to receive an order breaking up one's home!

Another reservoir of old Jerusalem we have seen today southeast of the Church of the Holy Sepulchre. It is called "The Pool of Hczekiah" and measures 250 ft. by 150 ft., drawing water, such as it is, from the Birket Mamilla Pool at the entrance to the Valley of Hinnom by a

conduit passing under Jaffa Gate. Some people believe this pool to date from the reign of Hczekiah (II Kings 20:20).

Although it does not have a single important spring inside its walls, Jerusalem has a profound secret history written in the unsuspected waterways beneath her everyday living levels.

SUPPLY FOR HOMES

In Roman times, Herod ordered construction of water reservoirs six miles from Jerusalem, with aqueducts to convey the supply to his embellished capital. But he stirred revolt by using for his project money paid by the Jews for Temple purposes.

Aqueducts were always vulnerable to enemy attack and, also, to local feuds. Bethlehemites a half-century ago protested against Jerusalem's drawing away water from their neighborhood and broke the conduit.

Private water supplies for homes in the capital nowadays include cisterns, in addition to the piped water from Ras-el-Ain. Hand or electric pumps are installed. Annual cleaning of these cisterns is insisted upon by public health officers; for when the heavy rains cease, disease abounds.

Excavated ruins of private homes from ancient times indicate that each dwelling or group of dwellings had a cistern, described by Macalister as a bottle-shaped opening in native rock, often 20 ft. deep and carefully lined with cement. Broken water pots found in the cisterns reveal carelessness on the part of those who did the daily chores. One venerable cistern gave a clue to some long-forgotten village tragedy—a sawn-asunder skeleton of a young woman close by a large number of male citizens. Have we here revenge for a murdered victim of a village feud?

CISTERNs FOR JERUSALEM'S SOLDIERS

Archaeologists digging currently in Jerusalem stumble from time to time upon ancient water towers, cisterns, aqueducts, and reservoirs. M. Solomiac of the Hebrew University reported in Bulletin No. 84 of the American Schools of Oriental Research that the Third Wall of Jerusalem provided,

for the soldiers guarding it, an adequate water supply by means of cisterns behind the wall and outside the watchtowers. Some of these cisterns have been recovered today. Each has the average capacity of a small room—about fifty cubic meters. A cistern would have water for about twenty men for a year— $1\frac{1}{2}$ gal. per day for each. The source of this water was, of course, rain falling around the cisterns and towers. Every tower had its own cistern. It was customary to have water reservoirs at principal gates of Jerusalem to meet the needs of officials and soldiers stationed there. One of these has been found just east of the Church of St. Anne, identified by Solomiac with the first tower of the Third Wall, north of the gate which once stood where St. Stephen's Gate now stands amid its many stones. This tower had its accompanying cistern. Archaeologically minded citizens of Jerusalem frequently turn up sections of Roman or earlier aqueducts, cisterns, and wells when excavating for homes or business blocks. Often they find fascinating clay lamps and treasures which had been dumped into such places in times of emergency. Some of the art treasures and coins found in the Athenian Agora excavation have come from wells.

For Sennacherib's famous stone aqueduct at Jerwan in Assyria, see description, p. 431.

The aqueduct to Acre is seen in illustration 8.

WATER HOLES AND CARAVANS

Water holes are usually just the widening out of desert streams or wadies where large herds of animals drink. We came upon an enormous water hole once in the desert between Beersheba and Gaza. Two thousand thirsty camels were drinking their fill (illus. 230). They looked like a whole river of camels. We wondered whether a drop would remain after they had filled their stomachs. Patient cameleers were dipping up water for the young baby animals, who were bound for far-off Petra. On a hillock stood the "sheik of the camels," his yellow head-veil floating in a breeze that blew from the Mediterranean thirty miles west; his cartridge belt was well filled against suspicious foreigners like

ourselves. He reluctantly accepted a cigarette from us, but did not smoke it, lest we poison him. His wife, a wild, heavily veiled, hot-tempered Delilah of the desert, wore a fortune in lumps of antique amber which looked like brands of fire in the noon sunlight. As we left, she mounted a donkey, sat sideways, and began to twist new wool onto her spindle.

Two or three water holes combine to make up one of the springs of 'Ain Kadeis, which may be near the Kadesh-barnea of the Hebrews. The wanderers found in the ample water supply of this general region, especially 'Ain el-Gudcirat north of 'Ain Kadeis, what they needed for their large flocks and nomadic households. Woolley and Lawrence believe that the Koscima Plain in the Wilderness of Zin was probably headquarters for the generation of Hebrews who made Kadesh-barnea a focal point of comings and goings into the Sinai region and elsewhere.

WELLS THAT HAVE INFLUENCED SACRED HISTORY

Wells, or man-curbed springs, have played a picturesque role all through the religious and cultural history of Israel. The digging of a new one was occasion for community rejoicing. Life and comfort depended then, as now, upon water. Even temporary halts by wayside wells were honored with well-known songs. When the wanderers from Egypt to Canaan came to a place whose name Beer means "a well,"

Then sang Israel this song:

Spring up, O well; sing ye unto it:
The well which the princes digged,
Which the nobles of the people delved,
With the sceptre and with their staves.

—Num. 21:17, 18

Wheels at Beersheba with their ancient wooden superstructure (illus. 231) are still watering the fields on sites known to Abraham and Isaac when they contended for these pivotal water supplies with Abimelech and other local rulers. The Covenant of Beer-sheba between Abraham and Abimelech is the oldest water-rights contract in the Bible. Abraham took seven

cwe lambs and set them apart from his flocks, to indicate to Abimelech that he had dug the wells. "Wherefore he called the place Beer-sheba; because there they sware both of them" (Gen. 21:28-31). Beersheba means "well of the oath." After the death of Abraham, the Philistines sabotaged the wells by filling them up—an early "scorched earth" policy.

However, "Isaac dugged again the wells of water, which they had digged in the days of Abraham his father." But the more Isaac dug, the more determinedly did the opposing herdsmen of Gerar take the wells from him, so that he dug one after another. These ancient water disputes are picturesque recitals of agelong struggles for the great essential of agriculture. It was necessary for Isaac to make the same sort of covenant with Abimelech that his father had made, before it was safe to pitch his tents in Beer-sheba Desert.

There are seven old wells at Beer-sheba today.

Jacob's Well at Sychar near Shechem became more famous for the scene of Jesus' conversation with a woman of Samaria than for its history in Old Testament times. We do not know just when Jacob dug it. It was part of his provision for the large flocks and family referred to in Gen. 33 and 37. Jacob bought a parcel of ground for "a hundred pieces of money" when he came in peace to the city of Shechem from Padan-aram. There he erected an altar and called it "El-Elohe-Israel" (God, the God of Israel). Next after the rearing of an altar came the digging of a well, near the place where his son Isaac had been spared.

Concerning Jacob's Well, W. M. Thomson long ago raised the question as to why the Patriarch went to the trouble of digging a well here, when from the near-by mountains of Samaria an unusually copious water supply gushed out, with a fine spring just west of where Jacob dug his well. Probably that source was already appropriated when Jacob and his large flocks came by, and a new well was the only solution. We can understand why Joseph, long attached to this landmark of his father, even though he lived in Egypt, requested to be buried in this parcel of ground which Jacob had bought from

Hamor (Josh. 24:32). Jesus spiritualized the attachment of his race to this Sychar well in his revelation about the nature of true worship to a woman of the Samaritan village (John 4). Jacob's Well today is encased in a Greek Church and still offers refreshing drinks.

Many a well in Bible lands was the scene of romance. Rachel first met Jacob when he "rolled the stone from the well's mouth" and helped her to water Laban's flocks (Gen. 29:10).

A well figured prominently in the courtship of Isaac and Rebekah. Isaac's servant, sent to Abraham's Mesopotamia to seek a wife for his son, was given a token by which he would recognize the "intended" one. The maiden of whom he asked a little water for his "camels" when she came to the well with a pitcher on her shoulder, a maiden who would be so gracious as to dip not only for the man but for his "camels" also (Gen. 24)—this was to be his master's bride. Here is one of the finest well-and-camel stories in the entire Bible, whether or not camels were domesticated at this early date.

The old well near the boyhood home of David at Bethlehem, from which he so longed to drink that his devoted warriors risked their lives to bring him a draught, is an eternal symbol of the wellsprings of memory (I Chron. 11:17). A beautiful legend attached to a well on the north edge of Bethlehem today indicates that here the Three Wise Men in search of the infant King halted to refresh their camels. As they rested, they saw reflected the star they had temporarily lost (illus. 227).

Mary's Well at Nazareth, still giving forth sweet, cool waters to townsfolk who come with their jars and their tin oil cans, is one of the best attested sites in Palestine (illus. 233). There the young Jesus came with his mother—or in her stead.

Wells made excellent hiding-places, we see in the story of Jonathan and Ahimaaz during the revolt of Absalom against David (II Sam. 17:19, 21). Pressed by their enemy, they jumped into a well in the courtyard of a woman who covered the mouth of the well with bruised grain. There they remained until the enemy had gone to Jerusalem after a vain search for

them. When the "Gestapo" had failed, the men came up from the well, sought David, and told him all they knew.

The strategy of desert wells in Mediterranean lands is always seen in times of war. When the British Eighth Army was retreating from the El 'Alamein sector of Egypt in 1942, they did not destroy strategic wells which Nazis could quickly dig again, but they poured fish oil into the few sources of potable water. The arriving Germans were puzzled over the presence of fish oil in desert wells here. But when the British recaptured El 'Alamein, they found that the wells they had polluted had been re-established by the Germans with a special apparatus for extracting fish oil. The army having water always has an initial advantage over a thirsty enemy.

Not even royal Egyptian engineers are always successful in digging wells. In 1300 B.C. Seti I failed to get for his miners in the eastern desert what his successor Ramesses II secured later. Hermopolis boasted a well 50 ft. deep, from which an endless chain of buckets drew water. The great well at Cairo was said to be 280 ft. deep; animals walked along a spiral path in its upper wall as they drew the chain-of-pots pumps. Water for the hanging gardens at Babylon was lifted in three stages by the chain-of-pots system to a height of 300 ft.

UNIQUE HYDRAULIC ENGINEERING FEATS

Modern engineers are amazed at the skill used by resourceful members of their profession in ancient Bible lands, by which they gave communities water supplies safe even in times of siege. We shall mention several engineering triumphs: the Gezer water tunnel, the Megiddo water supply, the Siloam Tunnel at Jerusalem, the Lachish shaft, and Sennacherib's Aqueduct at Assyrian Jerwan.

THE GEZER TUNNEL

The Gezer water tunnel is not only the oldest yet found in Palestine but was the first to be explored by archaeologists (1902-1909). It is part of Macalister's patient study of Gezer, city of Canaanites

and of their predecessors 3,000 years before Christ. Macalister could not tell how the first cave dwellers discovered the spring, but they must have been impressed by the great force with which it rose in the hollow of a huge rock, shut in with seclusion. The site of this spring, commanding the coastal plain to the Mediterranean and an easy pass between Jaffa and Jerusalem, explains its strategic value even down through the Christian Crusades. Here, in 1177, Baldwin IV defeated the mighty Moslem Caliph Saladin. Reporting on the Gezer water tunnel, J. Garrow Duncan comments on the amazing staircase cut down to the spring, whose pool was 94 ft. below the original rock surface and 130 ft. lower than the present surface. A striking photograph of the steps up from this water tunnel appears in Duncan's *Digging Up Biblical History*, Volume I, facing page 38. These steps became in antiquity so worn down that safety demanded cutting hand-grips in the rock wall and recesses for lamps. This tunnel was probably in use when the Amorite palace was built over its entrance, c.2500-1800 B.C. Probably the fortress-palace, beneath whose court the water gurgled safely, was built especially to guard it. Neolithic cave dwellers using flint tools have been suggested as the earliest excavators of the water passage. Who knows?

The Book of Joshua refers to Gezer (16:10): "they drove not out the Canaanites that dwelt in Gezer; but the Canaanites dwell in the midst of Ephraim unto this day, and are become servants to do taskwork." Probably the Canaanite control of Gezer water explains why these people were not easily driven out. David defeated temporarily the Philistine masters of Gezer in his day (1 Chron. 20:4). It remained for Egyptian militarists to subdue Gezer actually and to impress Solomon with their strength by giving it to him as part of the dowry of his Egyptian wife, daughter of Pharaoh (1 Kings 9:15-19). Remnants of square tower walls at Gezer today are thought to represent the work of Solomon's builders at Gezer for housing supplies and horses. The Hebrew king prized Gezer for its water as much as for its strategic location.

THE MEGIDDO WATER SYSTEM

Megiddo commands the Plain of Esdraelon, which has always been one of the world's conspicuous battlefields, and the pass over Carmel Ridge used by conquerors from Egypt and from the north. Megiddo was late coming into Hebrew hands and was held by Canaanites until c.1050 B.C., just before the reign of David. The Book of Joshua tells that this Hebrew warrior and his followers smote the King of Megiddo, among many other rulers west of the Jordan. It frankly states, however, that the Hebrews could not utterly drive out the inhabitants of Megiddo but put them "to taskwork" (Josh. 17:13). The secret of this same "taskwork" phrase may be that Megiddo, like Gezer, had an independent water supply.

Walking over the summit of Megiddo mound at Tell el-Mutesellim, we have understood why clever Canaanites held onto this dominating site. Provision for their own water supply has been revealed by the Oriental Institute of the University of Chicago, under the direction of the late James H. Breasted and his colleagues. Canaanites living on Tell el-Mutesellim about 1200 B.C., in order to get water, had to walk down the open face of their mound overlooking the Plain of Esdraelon, into a deep cavern outside the protective city wall. In time of battle, they were exposed to merciless arrows from enemy militia. To safeguard the women and men descending the hill for essential water, able Canaanite engineers some time between 1250 and 1050 B.C. provided a safer access to this precious spring by sinking a wide, stepped shaft from the top of the mound, straight through all the refuse of former occupation levels, until they struck the soft limestone of bedrock. When their amazingly accurate calculations had worked out the location of the hidden spring under their mound, they began to cut through on a horizontal line to strike the spring by tunnel. As one gang worked from the outside, another gang of laborers was digging toward them from the spring. When they met, an error of not more than 2 ft. had been made (illus. 228). Nothing in engineering history has revealed a more clever technique for so early a date. The

Siloam Tunnel at Jerusalem, where a similar skill was used, was not dug until the eighth century B.C., under Hezekiah. We may regard the Canaanite engineers of Megiddo as forerunners and, in a sense, tutors of the workmen of Hezekiah. Canaanites taught Hebrews many crafts, including masonry.

Robert S. Lamon, in his report on *The Megiddo Water System* for the Oriental Institute of the University of Chicago, calls this engineering feat "probably the most pretentious yet discovered in Palestine." But it is not unique when we consider the Siloam Tunnel and the one discovered at Gezer. He relates how, early in the history of Megiddo mound, citizens enlarged the supply by digging the spring into a well; they deepened it gradually and enlarged it intentionally from time to time, so that a double-headed cave developed to a height of from five to seven meters. Part of the abandoned cavern was being used in the twelfth century B.C. as a sentry post. It had a drilled lamp-platform. The skeleton of one guard was discovered when the Oriental Institute excavated the water system. He had met sudden and violent death at his post, protecting the supply as guards protect the great New York water sources at Croton and Kensico.

Some time before the eleventh century B.C., it was decided to extend the tunnel under the steps of the inclined passage leading from the shaft to the tunnel, so that people could lower buckets on ropes from the top of the great shaft and get water as from an ordinary well.

Illustration 228, of "Tunnel 1000," gives an amazing glimpse east through Megiddo water tunnel to the steps of the inclined passage leading down the shaft. The meter-stick shows where the two parties of diggers, excavating from opposite ends, met. The bulge at the left indicates a remnant of a dam broken through to let the water into the tunnel.

We have seen at Megiddo the eloquent staircase built on top of the ancient steps leading down the shaft. The original masonry stairs here were probably built by Solomon in the tenth century B.C., when he was constructing at strategic Megiddo one of his powerful chariot cities. To con-

trol this site was to control all Palestine, as Tuthmosis III of Egypt had discovered. It was worth 100 other cities, so long as it had water for its garrison.

THE SILOAM TUNNEL

Siloam Tunnel at Jerusalem was the result of a water emergency arising in 705 B.C. out of the threat of Sennacherib the Assyrian to Jerusalem (II Chron. 32:1-8). Hezekiah knew that a chief source of the city's water supply was the Spring Gihon (meaning "bursting forth") in the exposed valley of the Kidron. Citizens would be constantly exposed to enemy attack when they went to fill their water jars at the spring. So Hezekiah or his staff of engineers conceived the idea of bringing the water to a more protected site, the junction of the Tyropoeon and Kidron valleys. Laborers in two parties, as at Megiddo, began to dig from both ends of the project; but by much less skill than at Tell el-Mutesellim, where the two groups missed each other by only 2 ft., the Hebrew excavators dug 583 yd. to traverse only 366 yd. They were evidently trying to dodge some important structure, possibly the Tombs of the Kings. But they did ultimately meet and, near the exit, scratched upon the wall of Siloam Tunnel a famous inscription which we see today in the Turkish Museum at Istanbul. This—one of the oldest extant Hebrew inscriptions—reads: "Behold the excavation! Now this has been the history of the excavation. While the workmen were still lifting the pick, each toward his neighbor, and while three cubits remained to be cut through, each heard the voice of the other who called his neighbor, since there was an excess of rock on the right hand and on the left. And on the day of the excavation the workmen struck, each to meet his neighbor pick to pick, and there flowed the waters from the spring to the pool for a thousand and two hundred cubits; and a hundred cubits was the height of the rock over the head of the workmen."

Today water still flows through Siloam Tunnel from the intermittently flowing Virgin's Fount (ancient Spring Gihon) out in the exposed Valley to the Pool of Siloam, measuring 53 ft. by 18 ft., and

19 ft. deep. The pool is strewn with remnants of a church built in the fifth century by Empress Eudoxia. In constructing her church, she located its high altar over the place where the tunnel enters the pool; and its south aisle over a northern arcade of the pool, where Jesus told the blind man to wash and from which he "came seeing" (John 9:7). Before the Siloam Tunnel was erected, the Spring Gihon had been impounded in a reservoir used to water the King's Gardens south of Jerusalem.

THE LACHISH SHAFT AND WELL

Lachish, strongest of the fenced cities of Judah guarding the road to Egypt, was assaulted by Sennacherib, King of Assyria, in 701 B.C. Excavations conducted by the late J. L. Starkey for the Wellcome-Mond-Marston Expeditions (illus. 244) led to discovery of a great shaft which may unlock the secret of the main water supply of this Tell ed-Duweir, with its layer cake of leveled cities twenty miles east of the Mediterranean and twenty miles southwest of Jerusalem. Commenting on this shaft, Sir Charles Marston, in *The Bible Comes Alive*, tells of the excavation in 1934-35, to bedrock, of a vast rectangular shaft just southeast of the Jewish fortified palace and the Solar Temple. It descends through the limestone and extends about 80 ft. in one direction and 70 ft. or more in the other. Realizing that here was an impressive piece of ancient engineering, workmen continued until they came to a depth of 85 ft. They calculated that the people of Lachish had removed some 500,000 cu. ft. of solid limestone rock without aid of explosives, drills, or cranes. Starkey was mystified as to the purpose of this tremendous shaft, which he called "one of the greatest engineering feats achieved by the ancient craftsmen of Judah." Marks of the diggers' picks are still clear. The presence of huge stones in the soil made their labor extremely difficult. On the way down through the debris, stuff tossed out when Nebuchadnezzar burned Lachish came to light. Also, a coin of Ptolemy II (285-247 B.C.) and a plaque of Amenhotep II (1450-1425 B.C.) were found. Starkey remained of the opinion that this shaft

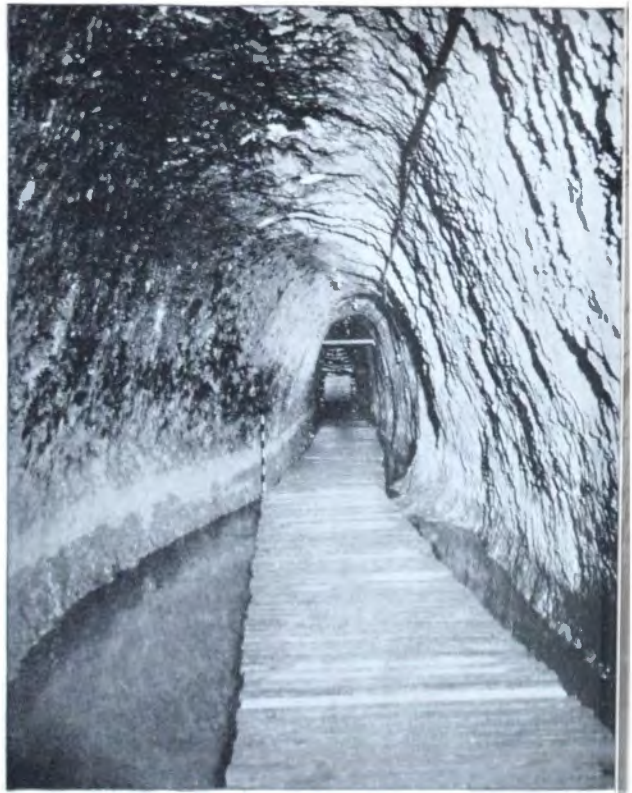


226. Water from huge underground cisterns beneath the ancient Temple Area at Jerusalem is used for ceremonials and for quenching the thirst of Moslems, who carry water away in goat-skin bags, jars, and oil cans.

227. Traditional Well of the Wise Men on outskirts of Bethlehem. Here the three discouraged Magi, according to legend, found their lost star reflected and continued their quest. The goatherd, drawing water from the well, empties it into the stone cup accessible to his flock (Ps. 23:5).



228. Underground tunnel of water system, Megiddo (ancient Armageddon). The tunnel is 160 ft. long from entrance shaft to cavern spring. High enough for women to walk with water jars on their heads. The bend in wall is due to a slight miscalculation by the ancient engineer, whose gangs of workmen cut toward each other from the two ends of the tunnel. (*Oriental Institute, University of Chicago*)



229. A holy man's tomb and shrine. By terms of his bequest, a cup of cold water is always available to passing pilgrims (Matt. 10:42). The unlaidd pipes on the road are for the new water system of Jerusalem which pumps a supply from the spring at Ras-el-'Ein, near Jaffa, to the capital.





230. A water hole for camels in the desert south of Beersheba.



231. Wells of Beersheba. Control of water in desert areas has always been an outstanding cause of conflict (Gen. 21:22-30).



232. The Barada River (Abana of Bible times) rises in the Anti-Lebanons and carries water through a steep ravine, giving life to Damascus and its environs (II Kings 5:8-12). A Moslem is observing three o'clock prayer along the rushing stream.



233. Mary's Well, at Nazareth, is still the main water supply, as in Christ's time.

234. Much of the greatness of Corinth rests upon its abundant water supply. The Peirene Spring, with its arched chambers where women filled their jars, supplied as much as 3,000 gal. per hour, keeping full the rectangular basin seen in middle front of the picture. This spring, one of several in Corinth, has received architectural adornment.



was in some way connected with the city's water supply and that the tower depicted in a bas-relief of Lachish, showing people emerging with water sacks on their shoulders, was a water gate having to do with an underground spring or reservoir. The Lachish shaft far exceeds in scale the one inside Jerusalem's walls running down to the Virgin's Fount, or the shaft to the water tunnel at Megiddo. The western end of the excavation, reports Marston, ends in a small cave. Pictures of the puzzling great shaft at Lachish appear in *The Bible Comes Alive*.

The authors of this book have marveled at a well 200 ft. deep on the slope of Lachish mound above the road to Gaza. It had nothing to do with the mysterious shaft, but it certainly was a boon to the fortress, whose citadel covered forty acres. Our Arab friend, Sultan, dropped a stone into this well to show us, by the unusual length of time it took to splash, how deep it was, safe in the limestone. He removed some ashes of charred olive wood tossed into it during the siege of Lachish when Nebuchadnezzar circled the city with blazing boughs. These Lachish ashes are on our desk as we write these words.

Another large-scale water supply was worked out for the fortress of Beth-shan, a mound on the terraces of the Jordan, commanding the pass east and west. Irrigation streams which worked in antiquity still feed the gardens from which we recently enjoyed mulberries and figs in the home of a citizen near this ancient citadel. In Bible times Beth-shan fortress was fed by gardens and orchards surrounding its flowering mound; even so was the Crusaders' Syrian Castle, Krak des Chevaliers, supplied during the romantic Middle Ages by abundant foods from the Valley of the Christian, rolling like a carpet at the foot of the fortified, cone-shaped hillock. No citadel is secure in any age without accessible food supply and potable water.

Still another hydraulic engineering feat from ancient Bible times is seen in the surviving arches of an aqueduct built by Sidonians to lead ice water to their port from a spring at the southern end of the Lebanon. A channel was cut in rock, down over gorge and promontory for a dis-

tance of fifteen miles. Some of the earthen pipes cased with lead have turned up.

A unique water system, described by Nelson Glueck in Bulletin No. 91 of the American Schools of Oriental Research, has been reconstructed a short distance north of the Wadi Nimrin to water gardens of the Emir Abdullah. Engineers opened a series of pits which, possibly in Roman times, were deep shafts leading to an underground channel with an east-west gradient. "Each shaft," says Glueck, "which separately taps the water table, is connected to the one west of it by a tunnel about the height of a man. . . . Each shaft collects water from the water-bearing earth it touches, passing it on through the tunnel to the next shaft until a strong stream is collected." Irrigation ditches carry it in shallow trenches to water the Emir's gardens.

SENNACHERIB'S AQUEDUCT AT JERWAN

The greatest kings of Mesopotamia all longed to be known as benefactors, through gifts of water to their subjects.

On the throne of Lagash in ancient Mesopotamia c.2975 B.C. a ruler called Ur-Nina assumed title of king, fortified the city wall, and prepared numerous canals and reservoirs for the protection of the Euphrates fields and gardens against summer droughts and winter rains. By these provisions his subjects judged him gracious to their needs.

Hammurabi "The Great" in the 18th century B.C. declared that his chief ambition was to be remembered as "father of his people." An ancient inscription carries his order to a man named Sin-idinam which reflects the king's concern for his country's water supply: "Gather the men who have fields along the Damanum Canal and have them dig this canal. Within this month let them complete the digging of the Damanum Canal." This author of the great code of Babylonian laws which has influenced judicial systems ever since was, like other Babylonian monarchs, proud of his efforts to improve living conditions by maintenance of irrigation canals and waterways and by beautification of the landscape with parks and gardens.

To Sennacherib (c.705-681 B.C.) is

given the credit for constructing the first Mesopotamian aqueduct yet discovered. Portions of it were excavated by the Oriental Institute of the University of Chicago. Sennacherib also introduced the Egyptian *shaduf* into his kingdom, where he cultivated as a hobby gardens which grew even cotton imported from India—"wool trees," as they were called. But the great hydraulic engineering marvel of his reign was the Jerwan Aqueduct, which conveyed water on a stone-paved causeway across the Gomer River 1,000 ft. wide to the gardens of Nineveh thirty miles southwest. Thirty miles, by the by, is the distance which the modern water supply of Jerusalem has to be pumped up over Judean highlands from springs at Ras-el-'Ein near Joppa on the Mediterranean coast. Royal engineers across twenty-eight centuries thus join hands.

The water supply provided by Sennacherib (c.690 B.C.) for his new capital at Nineveh reveals a taste for luxurious beauty in contrast to the austere Khorsabad city of his father Sargon. Sennacherib wanted to make his new royal environs a vast gardened area. For this purpose he needed much more water than the small Khosr supplied from the Tigris. Therefore, he drew a supply from the Gomel River, northeast of the capital, by an aqueduct across the deep wadi of the Jerwan. The mighty stone arches of this aqueduct are considered the world's oldest bridge. A canal runs on a stone-paved track. After the water had flowed in its stone-paved channel above the stream bed, it continued on this same smooth stone pavement, laid on concrete to prevent the water from seeping through. Where the aqueduct ended, the parapeted canal began. As indicated by Jacobson and Lloyd, the length of the aqueduct is more than 280 meters, and its width without buttresses 22 meters. When the project was completed, priests of the deities Ea and Enbilulu received precious gifts on behalf of these gods of springs and rivers.

Two million blocks of stone have been suggested as the material built into the fabric. Many of these stones bear today cuneiform inscriptions of great value. One of them tells that Sennacherib, King of the world and of Assyria, blended certain

waters from rivers, springs, and mountains and caused them to flow over a bridge of white stone blocks, until they reached a canal dug for the meadows of Nineveh. This inscription was found on a stone of the north side of the structure by the Iraq Expedition, which followed the identification of the Jerwan Aqueduct by Jacobson and Lloyd. It is the only structure of this type surviving from pre-Roman times.

Pleased with the success of his Jerwan Aqueduct and the resultant canal system for Nineveh which produced herb gardens, myrrh, Syrian plants, fruit orchards, and "trees such as grow in mountains," the king later built more parks and gave to citizens plots of garden land, together with sufficient irrigating canals to water their private fruit orchards. Such a boon was sufficient to keep any subjects happy. As we have already indicated, Sennacherib offered similar bribes to people of Jerusalem.

Not yet satisfied with his hydraulic and horticultural projects, Sennacherib made a visit to southern Babylonia's famous marshes, with their multitudes of birds and water creatures. As "something extra" he devised a swamp to arrest the too-great flow of waters at certain seasons, and in that marsh he grew fruit, vines, herbs, reeds, and woods used in palace construction.

IRRIGATION

For a discussion of irrigation, see Section 1, Agriculture, pages 4-6.

EXAMPLES OF EARLY SANITATION

Ancient engineers were more interested in getting water into communities of Bible lands than in getting refuse out. People threw waste water and garbage out their doors or windows into streets or dung heaps, as is the practice in backward Mediterranean towns today. In fact, "everything that was vile and refuse" (I Sam. 15:9), together with broken pottery and rubble of warfare, makes up the layers of history extending many feet below the present surface of Jerusalem or Jericho or Gezer or Ras Shamra.

Sir Arthur Evans, in his three-volume

report on *The Palace of Minos*, tells of a sensational plumbing and water supply at Cretan Knossos in the Middle Minoan period, which he dates from c.2200 to c.1600 B.C. Each section of the palace had its own drainage provision, with huge cloacae to carry off excess water from the court. The palace had, also, a series of terra-cotta pipes with collars and stop-ridges, tapering at the top of each section to ensure flushing out by pressure. The resultant shooting motion was far in advance of the parallel-piping methods formerly used. Modern engineers marvel at this device for pressure.

The domestic section of the Knossos palace had "remarkable latrines," well ventilated, with seats large enough to hold a vessel for flushing. In the golden age of Middle Minoan III, an actual bathroom was installed in "the finest house of Palaikastro." And the Knossos caravansary, where dusty men and animals laid down their burdens of commerce, had at the base of steps going up into the court a convenient foot-bath, with marble seats around its basin and with sufficient depth for hip-baths. Painted clay bathtubs, waste-ducts, a possible provision for hot water, and elaborate provision for running off waste water have been found at this venerable caravansary in Crete, adjacent to the Painted Pavilion. The House of the Frescoes had a jet for a lively fountain, a unique feature for this early date. It looks as if it came from the House of the Vetii in first-century Pompeii rather than from Minoan Crete.

We now know that palaces of Mesopotamia also had ingenious plumbing. Gordon East has described a bathroom in the palace of Sargon at Khorsabad which had a drain in the floor to carry off surplus water. But no evidence has been found of water being piped into a structure at this date and place. Ancient Egypt had bathrooms, with latrines such as we have used in "modern" Syria. But bathing consisted of pouring water over the body, or taking a dip in the Nile or a canal.

WATERS OF GREECE

The sun-baked highlands of Greece have always been more favorable to cultivation

of man's freedom than of his food. One of the great prewar blessings in which America and Greece cooperated was the building of the great dam at Marathon, the education of the Greek people in the matter of cleaning their wells and spraying them against malaria-breeding larvae, and the construction of new wells for farm families. Yet in ancient Bible times Greece knew how to regulate its flood seasons for the benefit of fruit orchards. In fact, as Semple indicates, irrigation of silted plains was carried on so early that Greeks gave the credit for their "horn of plenty" to legendary heroes and gods such as Heracles. The citizens of Larissa dyked the generous Peneus River for irrigating the orchards and fields which kept their tables bountifully supplied. All peoples of ancient Bible lands sooner or later learned the wisdom of co-operating with the God-given natural waters of their lands to ensure their own food supply.

FOUNTAINS OF CORINTH

Fountains were especially sacred to beauty-loving Greeks, who carved lovely marble fountainheads and drinking spouts, some of which have survived many centuries. Medicinal springs, such as we have enjoyed at Loutraki at the base of Mount Gerania, were early used for the arts of Hygeia. Leaning from our window in the twilight one evening at this place, we were startled to see among the trees on the hillside a charming statue of Pan, patron of springs and nature's charm.

Wherever the Greeks built cities in Palestine and Transjordan during the lifetime of Jesus, they turned the natural water supply of springs to their advantage, as at Jerash. They recalled the remarkable abundance of the springs that made Corinth noted, on its site between harbors at the foot of a rocky hill. Illustration 234 shows the famous Peirene Springs. They still serve the modern village near-by, looking out from layers of masonry into an open court with a reservoir where water was stored for conveyance to various parts of the commercial center. At the far end of the court, six heavy, round stone arches open into as many rock-cut chambers where people once stood to fill their grace-

ful water jars. Thousands of years of history are linked with the Peirene Springs of Corinth, from prehistoric through classic times. Paul certainly refreshed himself here time and again. Here Priscilla may have drawn water for her household of weavers, even though she lived at a distance. Several other enormous fountains bless Corinth. The Glauké, with its three rock-cut caves, provides water which springs from the base of the Acrocorinthus rock, filling four reservoirs for the people. And even more interesting than the Glauké is the Sacred Triglyph Spring in a cave to which we descended by a tiny staircase near the Temple of Apollo. We went down between portions of the beautiful Triglyph Wall, once decorated with polychrome designs whose pale tints are still visible. Those archaic steps, dating back thousands of years, were forgotten even in the time of Paul. Yet the steps are not much worn, for they probably were used only by temple attendants frequenting this sacred spring and were abandoned for a better spring not far away. Two fine bronze lions' mouths are the openings for the fountain, and the grooves beneath each of these indicate where temple jars were placed.

WATER CONTROL IN THE ROMAN EMPIRE

One of the most impressive sights as we approach Rome across the plain of the Campagna is the graceful reach of the Aqueduct of Claudius Appius, constructed in 312 B.C. This is the first of many such aqueducts and the ancestor of one built by Romans near Haifa in Palestine (illus. 8).

As Ellen C. Semple points out in *The Geography of the Mediterranean Region*, Rome made meticulous provision in her home peninsula for reclaiming marshes, such as the early Etruscans had initiated; for draining potentially rich plains; for canalizing the Po; for controlling water supply so that farmers owning downhill estates were dependent on the good will of men owning higher lands but yet had the advantage of rich soil washed down from the summits; and for construction of great sewers, such as the Cloaca Maxima at Rome. We have seen her elaborate provisions at Ostia, with its pipe lines for

running water, and at African Sabrata. Therefore, when the Roman Empire took control of public affairs in a province such as Palestine, Syria, and Transjordan, it introduced its own engineers and sanitary programs.

Hence in the era of Christ, there were constructed reservoirs, aqueducts, cisterns, and conduits, some of which remain to this day. If these ancient water systems were repaired, they would again help the land to produce as it did in the thickly populated Roman period. The rich, level farms tilled now at the base of Carmel, watered by springs from the base of the headland illustrate this possibility. So, too, the Jericho region watered by irrigation from the Jordan and by springs, could produce much more than its oasis is yielding now.

Near the Dung Gate of Jerusalem, out in the Tyropocan Valley, an ancient Roman sewer is being used at the present time. This first-century sewer runs under a newly discovered Roman road 36 ft. wide, paved with massive limestone blocks.

Water works magic with even the worn-out, unfertilized soil of Palestine today. Witness the beautiful little garden of the American Schools of Oriental Research in Jerusalem, producing flowers and trees just outside the old city wall, to the enjoyment of students and sick neighbors. The archaeologist Nelson Glueck and his wife have had no small share in grooming this pleasant amenity for Judah's ancient capital. Were the terraces of denuded Judacan farms tended with equal zeal, they would again yield returns equal to those of patient Lebanese farmers on their mountain terraces (illus. 11), and of the amazing tillers on mountain slopes in the prolific Atlantic island of Madeira. When terraces are walled with small stones picked from the slopes and kept in order, as below Bethlehem today, they hold up in the contest against erosion which washes fertile soil to valley floors. By the Roman era, baths of all sorts and comfortable marble-seated latrines were common, as we have seen at Corinth, in the North African colony of Sabrata and at the Roman port of Ostia. Such marble toilets were equipped even with statuettes of the gods of health and good fortune.

ADDITIONAL BIBLE REFERENCES

"On the same day were all the fountains of the great deep broken up, and the windows of heaven were opened" (Gen. 7:11)

"They washed the chariot by the pool of Samaria" (I Kings 22:38)

"Then went I on to the fountain gate and to the king's pool" (Neh. 2:14)

"gold of Ophir among the stones of the brooks" (Job 22:24)

"Passing through the valley of Weeping they make it a place of springs;
Yea, the early rain covereth it with blessings" (Ps. 84:6)

"Who turned the rock into a pool of water,
The flint into a fountain of waters"
(Ps. 114:8)

"As a troubled fountain, and a corrupted spring,

So is a righteous man that giveth way before the wicked" (Prov. 25:25, 28)

"I made me pools of water, to water therefrom the forest where trees were reared" (Eccles. 2:6)

"Blessed are ye that sow beside all waters, that send forth the feet of the ox and the ass" (Isa. 32:20)

"Nineveh hath been from of old like a pool of water" (Nah. 2:8)

"Jesus answered . . . Except one is born of water and the Spirit, he cannot enter into the kingdom of God" (John 3:5)

"Whosoever drinketh of the water that I shall give him shall never thirst; but the water that I shall give him shall become in him a well of water springing up unto eternal life" (John 4:14)

"Now there is in Jerusalem by the sheep gate a pool, which is called in Hebrew Bethesda, having five porches" (John 5:2)

BIBLIOGRAPHY

- Boggis, R. J. E., *Down the Jordan in a Canoe*, Society for Promoting Christian Knowledge, London.
- Breasted, James H., *Ancient Times*, Ginn and Company, Boston.
- Bromehead, C. E. N., "The Early History of Water Supply," *Geographical Journal*, March and April, 1942, Royal Geographical Society, London.
- Duncan, J. Garrow, *Digging Up Biblical History*, The Macmillan Company, New York.
- East, Gordon, *The Geography behind History*, Thomas Nelson & Sons, New York.
- Evans, Sir Arthur, *The Palace of Minos at Knossos*, Vol. 2, Part 2, Macmillan & Company, Ltd., London.
- Garstang, John, *The Heritage of Solomon*, Norgate and Williams, London.
- Glueck, *The Other Side of the Jordan*, American Schools of Oriental Research, New Haven.
- Hanauer, Canon J. E., *Walks about Jerusalem*, Society for Promoting Christianity amongst the Jews, London.
- Jacobson, Thorkild, and Lloyd, Seton, *Sennacherib's Aqueduct at Jerwan*, University of Chicago Press, Chicago.
- Jarvis, Major C. S., *Yesterday and Today in Sinai*, Houghton Mifflin Company, Boston.
- Jastrow, Morris, Jr., *The Civilization of Babylonia and Assyria*, J. B. Lippincott Company, Philadelphia.
- Lamon, Robert S., *The Megiddo Water System*, the University of Chicago Press, Chicago.
- Macalister, R. A. S., *A Century of Excavation in Palestine*, Fleming H. Revell Company, New York.
- Marston, Sir Charles, *The Bible Comes Alive*, The Religious Book Club, London.
- Scott, D. R., "Deuteronomy," *Abingdon Commentary*, Abingdon-Cokesbury Press, New York.
- Sample, Ellen C., *The Geography of the Mediterranean Region*, Henry Holt and Company, Inc., New York.

- Solomiac, M., "The Towers and Cisterns of the Third Wall of Jerusalem," *Bulletin* No. 84, American Schools of Oriental Research, New Haven.
- Sukenik, E. L., and Mayer L. A., *The Third Wall of Jerusalem*, University Press, Jerusalem.
- Thomson, W. M., *The Land and the Book*, Harper & Brothers, New York.
- Whiting, John D., "Canoeing Down the River Jordan," *National Geographic Magazine*, December, 1940, Washington.
- Woolley, Sir Leonard, and Lawrence, T. E., *The Wilderness of Zin*, Charles Scribner's Sons, New York.
- Young, George, *Constantinople*, Methuen & Co., Ltd., London.

WORSHIP

God is a Spirit: and they that worship him must worship in spirit and truth.

—John 4:24

Introduction

Unique Victory of Judaeo-Christianity
 From Tabernacle to Temple
 The Worship of Wanderers
 The Mountain of Moses' Monotheism
 Gilgal and Shiloh
 A Worship Scene in the Period of the Judges
 Sacred Dances
 In the Temple with Solomon and Jesus
 Rival Cults over Which Yahweh Prevailed
 Babylonian and Assyrian Cults
 Canaanite Fertility-gods and Pantheon
 Pillar Cults
 Egyptian Deities
 Greek Cults
 Roman Cerealia and Sibyls
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Idolatries of Manasseh
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INTRODUCTION

UNIQUE VICTORY OF JUDAEO-CHRISTIANITY

The sixty-six books of the Bible record worship ideas springing from millenniums of time and from a geographical area reaching from Asia Minor south to Egypt, from Babylonia and Assyria west to the Aegean islands, Greece, and Italy, and including the compact little keystone of all this Middle East—Palestine, Syria, and Transjordan.

The gamut of belief in that period of time and in that often densely populated area is as complex as we should expect. The development from crudest cultic attachments, vested in pillars, cups, nature-goddesses, storm-gods, serpents, stars, and man-consuming fires, to the spiritual

adoration of the one true God of the universe, yesterday, today, and forever, would make, if chronicled, "the autobiography of a spiritual evolution." Writers of the Bible were what Leonard H. Robbins in *The New York Times*, January 2, 1944, calls "the world's most candid realists, risking displeasure to speak the needed truth. Their world was satisfied with itself. . . . It was much like our own world, its times were often like ours, and its people like us. Centuries cannot cloud the eternal message of the Bible. We understand why it has endured so long. Here is the Bread of Life in a day of need. It calls to the noblest in us. Always it holds up the shining promise that a better world is possible, when or where "the earth shall be full of the knowledge of Jehovah, as the waters cover the sea" (Isa. 11:9).

An early worship scene recorded in the Bible is in the eighth chapter of Genesis, showing Noah, after the watery cataclysm had subsided from his Babylonian world, building "an altar unto Jehovah." On this he sacrificed "of every clean beast, and of every clean bird, and burnt offerings on the altar. . . . And Jehovah smelled the sweet savor." This poetic rendering of man's gratitude and the response of an anthropomorphic God climaxes in the beautiful promise, "While the earth remaineth, seed-time and harvest, and cold and heat, and summer and winter, and day and night shall not cease."

The last worship scene recorded in Scripture presents John of Patmos, absorbed in mystical communion with God and the Lamb—"in the Spirit," on a "mountain great and high," with the "holy city Jerusalem, coming down out of heaven." John needed no city of refuge, no altar, no temple, no smoking lamp, no fragrant incense ascending, for his direct fellowship with Jesus, "the root and the offspring of David, the bright, the morning star." From the altar of a vacillating Noah to the mysticism of John, a tremendous stride in the development of worship has been taken. The stages between the two are found within the covers of the Bible, which today challenges us as Jesus challenged his age, "When the Son of man cometh, shall he find faith on the earth?" (Luke 18:8)

With William F. Albright, in *Archaeology and the Religion of Israel* (p. 176), we heartily agree: "Underlying any serious investigation of the religion of Israel is the full recognition of its historical character. The Judaeo-Christian tradition is unique in this respect: No other great religion of the past can compete with Judaeo-Christianity as a phenomenon of historical order. . . . Our documentary sources for the history of Israel from the late thirteenth to the early fourth century B.C. are, in general, remarkably reliable. . . . Most of the matter in Kings is singularly accurate from the standpoint of the modern historian, as has been shown by repeated archaeological and epigraphic [pertaining to inscriptions] discoveries."

FROM TABERNACLE TO TEMPLE

In the closing chapter of this book, the authors wish to focus attention upon a few objective realities by which people of Bible lands tried to lift themselves to a satisfying God in "wonder, love, and praise." Some of these tangible but usually disillusioning aids to worship are revolting to us today. Under protests of prophets and revelations of nobler ways they were gradually cast off, as children throw away toys which have satisfied outgrown age-interests. To many accessories of primitive worship we have referred in Animals; Nutrition, with its treatment of sacrificial acts; Arts and Crafts, dealing with matters ranging from cultic figurines to the Jerusalem Temples of Solomon and Herod; and Social Structures.

A few generalizations we now point out, touching especially upon the influence of powerful neighbors on the worship of Israel. This "peculiar" people received, first through oral tradition, then in written form, a covenant of life with God and Jesus. Millions of Christians the world around today are using this pattern of fellowship as they seek the ultimate justification of their own existence in a costly and expanding universe.

THE WORSHIP OF WANDERERS

While the Children of Israel were still migrants in a wilderness which always has begrudged sustenance, they received from Moses their elementary instruction in monotheism and retained strength by having in their midst, even if they dared not touch it, the Tabernacle containing the ark of the covenant described in detail in Ex. 25ff. Israel's apostasy to the golden calf, made of their own golden earrings (Ex. 32), may or may not be a reflection of the exposure of the Joseph tribe in Egypt to bull-worship. This cult was prevalent in the Delta at Heliopolis (for the Mnevis bull); and especially in the region of Memphis and Saqqarah, where the Apis bulls, embalmed, were worshiped with ceremonies which gripped the minds of the people. As Steindorff and Seele point

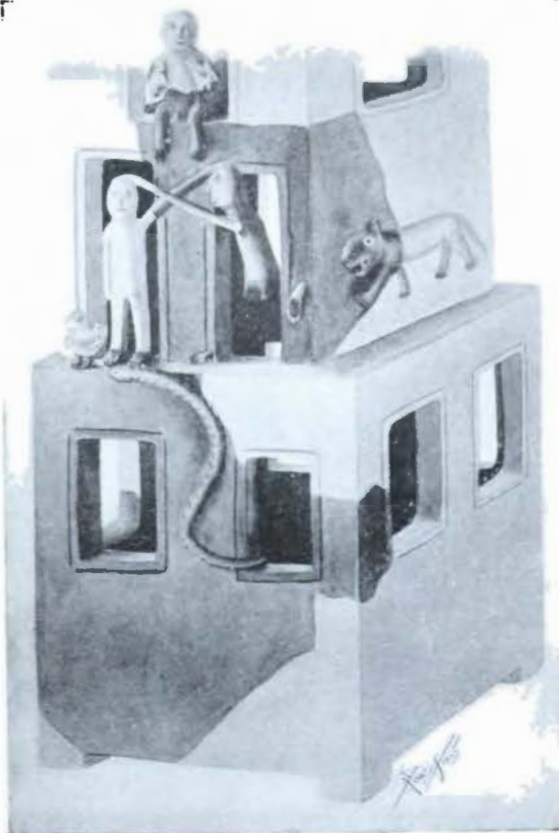
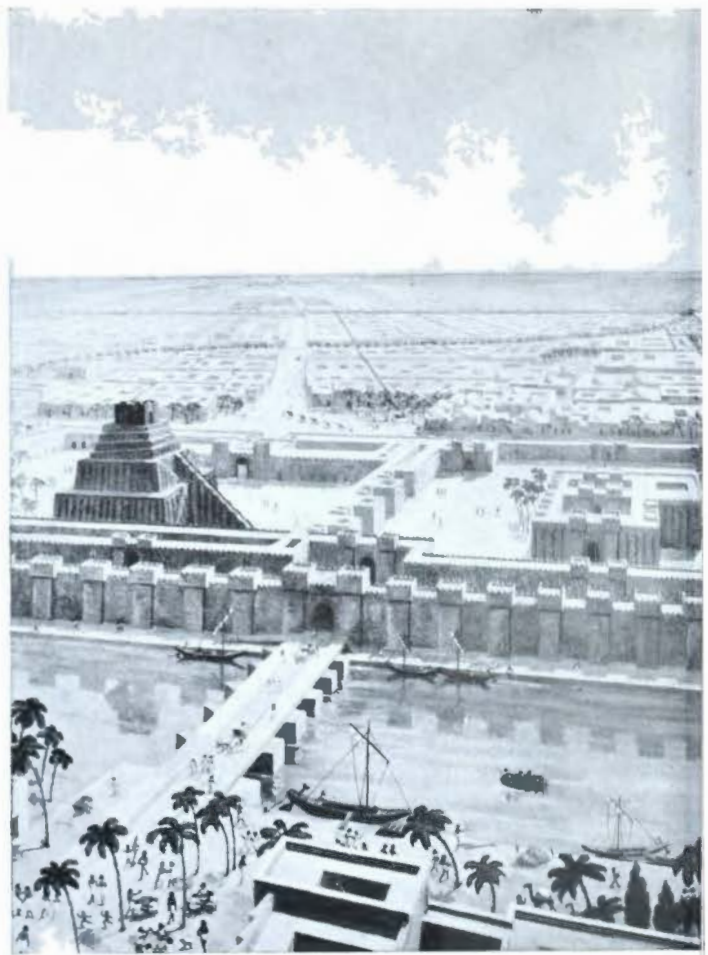


235. The Rock Moriah, traditional site of Abraham's offering of Isaac. This sacred ceremonial rock was covered by Solomon's and Herod's Temples and today lies beneath the magnificent seventh-century Dome of the Rock, a Moslem masterpiece.

236. Temple of Poseidon on Cape Sounion (Colonna) erected to propitiate a stormy-mooded sea-god feared by mariners rounding the windy headland to and from Athens.



237. Bird's-eye view of Babylon, era of Nebuchadnezzar (604-561 B.C.). The high massive structure, the Tower of Babel, so called from Hebrew account in Gen. 11:1-9, is the Temple of Marduk, known as the "House of the Foundation Stone of Heaven and Earth." Behind the temple ran Procession Street north to the royal palace, with the Hanging Gardens, and Ishtar Gate. See the camel train swinging along Procession Street. The tower was built with a core of sun-dried brick, covered with a facing of kiln-burnt brick. It had seven stories, the first two of which were reached by a triple stairway; from thence priests reached the top by a continuous ramp. The Euphrates River is along the west wall of the city. (*Oriental Institute, University of Chicago*)



238. Cultic shrine house of Ashtaroth, from a room outside a Canaanite temple of the goddess at Beth-shan, c.thirteenth century B.C. (*University Museum, Philadelphia*)

out in *When Egypt Ruled the East*, the Apis bull had white spots on its black hide, a triangle on its forehead, and a crescent moon on its right side. We are astonished that a people as intelligent as the Egyptians could devote to these creatures such sumptuous burial places as the mausoleums provided in the New Kingdom by Amenhotep III and the underground galleries we have visited at Saqqarah called the "Serapeum," laid out in the Nineteenth Dynasty by Ramesses II. The Serapeum was a favorite pilgrimage goal down to the era of the Ptolemies (323-146 B.C.). For picture of an embalmed bull, see illus. 17.

Bull-worship among Hebrews persisted as late as c.933 B.C. Jeroboam, new king of Israel at Shechem in the hill country of Ephraim, wished to dissuade his subjects in the newly divided kingdom of Solomon from persisting in their traditional pilgrimage to worship at Jerusalem, lest they swear allegiance to Rehoboam, King of Judah. So he subtly suggested, after making two calves of gold: "It is too much for you to go up to Jerusalem; behold your gods, O Israel, which brought thee up out of the land of Egypt. And he set the one in Beth-el, and the other put he in Dan." The gullible people responded, going to Dan in northernmost Palestine to worship before the calf, and to Beth-el, where they feasted and sacrificed to calves, with incense and with unorthodox priests officiating who were "not of the sons of Levi" (I Kings 12:25-33).

One of the earliest altars described in the Old Testament was constructed of earth by Moses for his people, in the years when he was conveying to them the Ten Commandments (Ex. 20). Burnt offerings and peace offerings on that earthen altar were satisfactory. "And if thou wilt make me an altar of stone," Jehovah instructed Moses, "thou shalt not build it of hewn stones; for if thou lift up thy tool upon it, thou hast polluted it. Neither shalt thou go up by steps unto mine altar."

The first sacrifices used in Hebrew worship were the oils, grains, and lambs consecrated to Jehovah. The statutes regulating these devout offerings were ordained to continue throughout generations. These laws applied to native assemblies as well as to "sojourners" (Deut. 15).

THE MOUNTAIN OF MOSES' MONOTHEISM

John Garstang, in tracing the heritage of Solomon from Moses and other religious leaders, marvels that Moses, descending from communion with God in a smoking mountain which may have been volcanic, returned to his people (Ex. 34) bringing not a blueprint for a holy war, such as might have surrounded him with the loyalty of all neighboring people, but a code of Ten Commandments, which were the summary of a moral and a civil code associated for the first time with the unique worship of a single God. This association of worship with morals, continues Garstang, marks a definite phase in the story of religion. At Mount Horeb in Sinai, the solar deity of the farmer was blended with the Yahweh who was guardian of shepherds. Here El and Yahweh were somewhat synthesized. Such a conception of deity was the one presented by Moses in the commandment, "I am Jehovah thy God, who brought thee out of the land of Egypt, out of the house of bondage. Thou shalt have no other gods before me" (Ex. 20:1, 2).

GILGAL AND SHILOH

To the author of Joshua we are indebted for recording the first worship site used inside the Promised Land—*Gilgal*. "The people came up out of the Jordan on the tenth day of the first month, and encamped in Gilgal, on the east border of Jericho. And these twelve stones, which they took out of the Jordan, did Joshua set up in Gilgal" (Josh. 4:19, 20). The people were taught what to tell their children asking, "What mean these stones?": the stones were a reminder that Jehovah had brought Israel over dry Jordan bed, as He had led them across the Red Sea dry-shod, for Jehovah is mighty, a God to be feared by Israel forever.

In the subsequent "assignment" of territory to the Hebrew tribes at *Shiloh*, it developed that this site now excavated by archaeologists (p. 162) became a central uniting point "whither the tribes went up each year to worship Jehovah." There the ~~tent~~ of meeting (Tabernacle) sheltering

the sacred ark was set up and safeguarded during the conquest of Canaanites and Amorites. There the priests Phineas, Eli, Samuel and others ministered.

As Victor L. Trumper points out in *The Mirror of Egypt*, the Tabernacle was where the humble worshiper came with his offerings, re-establishing fellowship with Deity after commission of sins. Offering the priest his gifts to burn in the court, he received a blessing. And in the court of the Tabernacle, he learned from that priest the sacred law and worship songs of his people. This sanctuary had fine linen curtains and coverings of dyed rams' skins. The ark of acacia wood and metal accessories are described in Ex. 26 with an accuracy whose details check with archaeologically proven customs for that era. Even the branched Menorah, or candlestick, is not anachronistic, for such were used from the twelfth century B.C., at least.

Israelites who proved satisfied with the land assigned them at Shiloh by the lots of Joshua, if we take literally the oversimplified statement of land distribution, must have looked back to Shiloh with sentimental gratitude, even as Americans look upon Plymouth Rock as a stepping-stone to what the United States as a nation has become. Seven tribes received their portions at Shiloh. For of the twelve, the Levites had been set aside for religious service and claimed no territory; the people of Gad, Reuben, and Manasseh had already staked their claims east of the Jordan; and Judah's allotment stretched west of the Dead Sea and Kadesh-barnea, reaching west to the Mediterranean.

A WORSHIP SCENE IN THE PERIOD OF THE JUDGES

An interesting worship scene in the period of the judges has to do with the destruction of an altar of Baal and the wooden Asherah that stood by it. In the midst of a heated campaign of Gideon against the Midianites, Jehovah's angel commanded that an altar to Jehovah be built and cakes of unleavened meal and a fresh-killed kid laid upon it under an oak tree. Once Jehovah proved His acceptance of Gideon's offering, He commanded him

the next night to tear down the altar of Baal and the Asherah. This so infuriated the Amalekite and Midianite foes that the eastern stretches of the Valley of Jezreel as it drops down to the Jordan resounded with battle. There a mere 300 of Gideon's selected warriors won their picturesque victory of the torches, pitchers, and trumpets recorded in Judg. 7.

Soon after the settling-down process began for Israel in the period of the judges, "high places" which had been sacred to Canaanites were adopted by the newcomers "because there was no house built for the name of Jehovah." The people sacrificed there, and even Solomon sometimes burnt incense in the high places, loving "Jehovah and walking in the statutes of David his father." A charming description of a religious festival late in the period of Samuel the prophet is given in I Sam. 9.

The horn used by Samuel for holy anointing oil at the selection of Saul and David (I Sam. 16:1); the flesh-hooks by which priests drew legal portions of flesh from sacrificed animals (I Sam. 2:13); the circuit covered annually before the monarchy by judges of Israel, men who itinerated from Beth-el to Gilgal and Mizpah and back to the altar at Ramah, as early American Methodist preachers itinerated among settlements of western Pennsylvania and Ohio; the abundant slayings of firstlings of prosperous farmers' flocks (I Kings 1:18)—these features characterized the worship of early Israel.

One of the first altars of Saul, earliest king of Israel, was erected in a field during the conquest by him and Jonathan of Philistines "from Michmash to Aijalon" (I Sam. 14:31-35), while they were still rustic chieftains. Their offerings to Jehovah consisted of spoils of sheep, oxen, and calves. God received the first portions of their booty. The balance, "without the blood," was claimed by the victorious warriors. It was prepared according to specific laws. The Jewish Torah outlines the early ritual of Israel in their Tabernacle and elsewhere.

SACRED DANCES

Ritualistic dances, such as have characterized many primitive religions, were

part of the worship of Israel in the days of Moses and his sister Miriam. The famous celebration at the Red Sea crossing, with dancing and playing of timbrels or tambourines, and singing of the famous song of Ex. 15, was of Egyptian source. Of the ritualistic rhythmic movements of King David "before Jehovah" recorded in II Sam. 6:14, when the ark was brought up to Shiloh, we see the sort of thing which persists today among Moslem Lebanese near Sidon, in their orgies of dancing dervishes. Fosdick calls the prophets mentioned in I Sam. 10:5 "Hebrew dervishes."

Some critics see, in the limping between Baal's emblems (I Kings 18:21) and the offerings to Jehovah, a cultic dance in honor of the nature-god.

Gibeon, Mizpah, Gilgal, and Beth-el all contributed their chapters to worship prior to the building of the Jerusalem Temple. So, too, as Mould suggests, the sacred mountains played large roles: Mount Nebo in Moab, which even before Moses was well known through Babylonian worship; and adjacent Mount Pisgah, where seven altars were built by King Balak to care for his sacrifices (Num. 23:14)—a part of the Balaam story which Albright has recently illuminated. The worship contest between Balak and Balaam suggests the struggle in later centuries on Mount Carmel between the priests of Baal and God's prophet Elijah (I Kings 18) (p. 228). It is hard to imagine a time when there was not a shrine on the impressive summit of the Mount of Olives, from which the dramatic topographical drop down to the Jordan Valley leads the eye to the east; and from which the view across the Kidron to the west leads on to the aristocratic site of the first "City of Peace," Jerusalem. We are told that before the building of the Jerusalem Temple David liked to walk up "to the top of the ascent where he was wont to worship God." And even after the completion of the Temple, Solomon erected in "the mount that is before Jerusalem" a high place where his foreign wives burned incense to their abominable gods, Chemosh and Molech (I Kings 11:7).

We know the sacred use to which Jesus

put the groves of the Mount of Olives (Luke 21:37) (illus. 168).

To the holy mountains of Old Testament times we add the mount of Christ's transfiguration, whether it be Galilean Tabor (illus. 164) or Lebanese Hermon.

IN THE TEMPLE WITH SOLOMON AND JESUS

When Israel's capital became established at Jerusalem and Solomon's Temple was erected as the central shrine, people began their noble pilgrimages which continued, although with interruptions, through the next 1,000 years of Bible times, from the dedication c.962 B.C. until A.D. 70 when armies of the Roman Titus destroyed the Temple.

Pilgrim songs of ascent have become incorporated in many Psalms. Jehovah was King of all the earth. He was to be praised in "his holy mountain, beautiful for elevation, the joy of the whole earth." The pious Jew felt that he would rather be a doorkeeper in the house of the Lord for a single day than to dwell in the tents of wickedness forever. For suggestions about the appearance of the various temples on Mount Moriah see pages 99 and 442, and for its organization of staff after the return from Babylon, see I Chron. 9, listing priests, Levites, porters, keepers of the entry, singers, musicians, and guardians of the sacred vessels. Zechariah, writing about 518 B.C., yearned for a time when all the "families of the earth would be going up to Jerusalem" from year to year to worship the King Jehovah of hosts and to keep the Feast of the Tabernacles.

In Section 5, Arts, we have considered the architecture of the Temples of Solomon and Herod.

One of the great worship moments on Mount Moriah occurred when King Solomon, having finished his great building enterprise, called his people together (II Chron. 6) and in profound reverence knelt before Jehovah on the exclusive little plateau where his gleaming structure stood. Stretching up his hands, he thanked Jehovah for all his kept promises of leadership, imploring Him to hear His people's intercessions in their new sanctuary. He

identified even the elements, rain and sun, with his Jehovah God. He turned over to Him the destinies of his helpless citizens and of foreigners, too. Times of battle, times of captivity, times of sinning, times of repentance—all these the king swept into his upsurging prayer. He seems to take the entire nation in his arms, offering them to Jehovah with all their problems. A very great assembly witnessed the dedicatory prayer. Many had come up even from Egypt for the occasion and were living in tents outside the walled capital. We are told that Jehovah responded to the passionate prayer of the king, for He appeared to Solomon "that night, and said unto him, I have heard thy prayer, and have chosen this place to myself for a house of sacrifice . . . that my name may be there forever." We who walk today in this Temple Area are profoundly stirred as we realize that approximately 2,877 years have elapsed between our day and Solomon's, and worship is still going on in this place, now known as the "Haram esh-Sherif," or Place of the Noble Sanctuary. It is sacred to Moslem, Christian, and Jew but is not available to the last. The section of Temple masonry known as the "Jews' Wailing Wall" is the holy place of Hebrews today (illus. 189).

The Jerusalem Temple known to Jesus had been under construction long before the Nazarene's first presentation by his parents in this sacred place. It was not yet complete when the twelve-year-old Jesus interviewed scholars in its court (Luke 2:41-50). He died before the final touches had been put upon it. Like the Cathedral at Milan, its details involved many years of skillful work. Its porch had a colonnade 700 ft. long. Eighteen marble pillars supported the central aisle. It was higher than York Cathedral in England. The great center court of the Gentiles was approached from somewhere near the façade of the present Mosque el Aksa. Here the money-changers fingered their coveted coins (illus. 90) and made change from many foreign currencies into ones acceptable at the Temple. Across the court of the Gentiles Jesus came, until he reached a marble screen about four ft. high, and by steps beyond it entered the inner court from which foreigners were excluded by a rigid

interdict in Greek and Latin. One of these prohibitory slabs we have seen in the Istanbul Museum's collection. It reads: "Let no foreigner enter within the screen and enclosure around the Holy Place. Whosoever is taken so doing will himself be the cause that death overtakes him." On the terrace beyond the marble screen—a terrace still present in the contour of the ground—Jesus stood facing the central building of the Temple. Nine gates led into it: four were on the north, four were on the south, and one, the Gate Beautiful, faced the Kidron Valley and the Mount of Olives like the Golden Gate today (illus. 166). That Gate Beautiful, which figures in the healing of the man born lame (Acts 3:1-10) required a staff of twenty men to swing it open each morning and to close it at night. By any one of the nine gates, Jesus, a male Jew, might enter. Women could not proceed beyond their own court. The innermost court was reserved for the priest and adult Hebrews arriving to offer sacrifices. At the very heart of that innermost court was enshrined the sacred natural stone of the Rock Moriah used as the high altar. On its rough natural surface animals were killed as offerings to God. Through holes beneath, the spilled blood flowed down to the valley below (illus. 235). Today the awesome impressiveness of this ancient altar rock is surrounded by the elegant grille of art-metal placed about it by medieval Christian Crusaders. It has never been disturbed by the present regime of Moslems who in the seventh century built a prayer-place over this rock, which is as sacred to followers of the prophet as it is to disciples of Jesus.

As we walk today across the solemn enclosure of the ancient Temple Area, we visualize such scenes as Luke describes when "every day he [Jesus] was teaching in the temple; and every night he went out, and lodged in the mount that is called Olivet. And all the people came early in the morning to him in the temple, to hear him" (21:37-38). Or we attempt to picture the wrath of the Master when he "entered into the temple of God, and cast out all them that sold and bought . . . and overthrew the tables of the money-changers, and the seats of them that sold the doves." Among the crowds of lowly Jeru-

saulemites who today come to pray among stones that probably heard the Saviour's voice, we see faces like those of the blind and the lame who "came to him in the temple; and he healed them" (Matt. 21:14).

RIVAL CULTS OVER WHICH YAHWEH PREVAILED

Pursuit of agriculture in all Bible lands led cultivators into the worship of fertility-gods who gave fields and populations their increase. These earth-goddesses and -gods exerted an influence which spread like fecundating pollen through the entire eastern Mediterranean world from Syria to Italy and from Egypt as far north as Greece. They are the oldest of the chief Semitic gods. Recent discoveries at Haran in southeast Anatolia and at Mari on the Middle Euphrates confirm many Israelitish traditions.

BABYLONIAN AND ASSYRIAN CULTS

Among the many influences disseminated by the early inhabitants of the Tigris-Euphrates Valley, the Sumer-Accad peoples, was the concept of gods of reproduction, such as Dagon, who in the Canaanite pantheon became father of *Baal* and brother of the virgin goddess of fertility, *Anath*. It is believed that Dagon was the Mesopotamian grain-god as early as 2500 B.C.

Down the centuries, inhabitants of the hot, damp, productive Mesopotamian valley paid homage to fertility-gods. In the Royal Library of King Sargon II of Assyria (c.722-705 B.C.) there were thousands of clay tablets, to which his son Sennacherib and his grandson Esarhaddon added. Many of these have now been excavated and published. One from the great library of Assurbanipal (c.668-626), preserved in the British Museum, bears in metric form a legend of ancient agricultural forces at work. It tells of the goddess *Ishtar* descending to the underworld to seek her young husband *Tammuz*, and trying to force her way through seven gates to find her consort. Being goddess of love, she so influences even the animal world that no offsprings are begotten during her

absence. The whole course of beasts and of nature is changed. What Dagon was to grain-growing, *Ishtar* was to animal husbandry.

The nature pantheon of ancient Babylonia as listed by Patrick Carleton is as follows: *An*, the sky-god; *Enlil*, the deity of wind; and *Enki*, power presiding over earth and waters. *Ningal* was the mother-goddess. *Namuzi* (the *Tammuz* of the Bible), or *Abu*, was god of plants, carried to the underworld and annually resurrected. *Utu* was the sun-god. *Nannar* was the moon-deity, as we have already indicated. Of minor deities there were scores.

Lower Mesopotamia also came into contact with *Marduk*, a form of sun-god who carried prayers to heaven and who became, in later times, chief god of Babylon, even as *Assur* became principal god of Assyrians, related to *Enlil*, a Sumerian god next in rank to *An*.

Babylonians exalted also *Ishtar*, their lewd goddess of love, similar to the Greek *Aphrodite*; *Nabu*, a *Mercury*, patron of science and learning; *Nergal*, god of hunting, war, and the underworld, similar to the later *Pluto* of the west; and *Nusku*, a god of fire. Chaldeans, especially, were interested in gods of fire and of the heavens, which aided their penchant for astrology. At least one star-reader must have been among the Wise Men who followed the star to Bethlehem at the birth of Christ.

Even prior to the development of the monotheism of Moses, Hebrews, according to Albright in *From the Stone Age to Christianity*, had a religion. This faith before the patriarchs moved into Palestine centered in *Shaddai*, god of the mountain(s). Another very early name for Hebrew deity was *El*, appearing in such names as "Beth-el" (house of god). "Early Hebrew popular religion," says Albright, "had a triad of deities consisting of a father, *El*; a mother known possibly as *Elat* or *Anath*; and a son, the storm-god called perhaps *Shaddai*." In many regions of the ancient Middle East, from southern Arabia and Egypt to Asia Minor, a triad of gods or family of deity existed perhaps as much as 7,000 years ago. In Egypt, for example, one triad was *Osiris*, his wife *Isis*, and their son *Horus*, who became the chief national god (illus. 240). A depiction of this Eryp-

tian trinity appears on the scarab in illustration 150. Likewise, in Egyptian Thebes, the god Amun, his wife Mut, and their moon-god-son Khonsu were honored as a "holy family." And in Memphis, another triad consisted of Ptah, Sekhmet, and a son Nefertem, as Steindorff and Seele indicate in *When Egypt Ruled the East*, Chapter XII.

Perhaps the journey of Abraham from Ur to Canaan, chronicled in Genesis, was a heira, or flight, of protest against the popular gods of Mesopotamia. There is certainly the conviction of a great "call" behind these words by an unknown writer: "Jehovah said unto Abram, Get thee out of thy country, and from thy kindred, and from thy father's house, unto the land that I will show thee . . . and they went forth . . . and into the land of Canaan they came . . . and [at Beth-el] he builded an altar unto Jehovah . . . and . . . journeyed, going on still toward the south." The city-born Patriarch, seeking for a new city whose "builder and maker was God," had followed the history-making curve of the Fertile Crescent.

Babylonia exercised greater formative influence upon the religion of Israel than either Canaan or Egypt. When Abram lived at Ur in the southern mud flats between the Tigris and Euphrates, he was in touch with the cult of the moon-god Sin. He probably met Sin, also, at Haran, as he swung north along the Fertile Crescent toward Syria and Palestine. There is evidence that Terah, "father" of Abraham, worshiped Sin at Haran. After the arrival of the Patriarch in Canaan, the dominating influence became Canaanite. Of these gods, El, a sky-god with solar attributes, was chief. Nomads like Abraham were conscientious about paying homage to El at shrines they met on grazing treks.

John Garstang, in *The Heritage of Solomon*, points out how natural it would be for the patriarchs in the beginning to worship a moon-god. Grazing people find more comfort in the cool moonlit nights for their treks and their pasturing than in the sun-scorched day preferred by town dwellers. The guidance of the moon's light was treasured by all caravans traveling after dark. "The moon shall not smite thee by night" takes on new meaning in this con-

nection. Many of the oldest Hebrew feasts were determined by phases of the moon. Certainly the Passover, set by the pascal moon which had led the Israelites up from Egypt, grew out of a typical nomadic festival once celebrated in honor of a moon-god. It falls on the night of the full moon of the spring month Nisan and determines the date for Christian Easters.

Garstang also traces the Babylonian reverence for the earthy snake to a real danger which lurked in the path of nomads like Abraham. The serpent was appeased through worship which filtered into Canaan and other worshipping groups to the west and north of Babylonia. It became a key symbol in fertility-cults.

Abraham's contemporaries built moon-god temples on man-made hillocks or ziggurats of stepped stone with impressive ramps for processions. Families also had chapels for private worship in their own homes—a challenge to revival of the profitable family-worship habit in our own late age of religious confusion and political chaos. An imaginative reproduction of the temple at Babel on its artificial platform (ziggurat) is seen in illustration 237.

Along with the moon-god Sin, Shamash the sun-god was a chief object of veneration among Babylonians and Assyrians. Many impressive clay tablets have been dug up, showing worship scenes where Shamash is seated within a shrine upon a throne guarded by mythical beings.

A cylinder-seal in the collection of the authors bears a scene incised on its tiny hematite surface during the First Dynasty of Babylon, era of Hammurabi and of Abraham (c.1728-1686 B.C.). It shows Shamash, attired in a long priestly skirt and pointed cap, holding in his hand some cultic object. Can it be a twig, to prevent his breath from marring the sun-god's image? He is approached by a worshiper in a short skirt and conical headgear. Near-by is a naked Ashtaroth figure. The diminutive seal, not more than a half-inch high, with a diameter of a quarter of an inch, also shows a beautifully incised star, a bird, a serpent, and a monkey. Another depiction of a sun-god appears on the ivory cylinder from the region of Lake Van (illus. 45).

Babylonian families had a choice among

the gods they adopted. Hence Rachel's stress upon the value of the teraphim (Gen. 31:19), small images of her family's cultic objects or of ancestors which had once stood in niches near a household altar. Similarly, in Italy during the first century A.D., family lares occupied niches close to the hearth where foods were prepared.

The old Sumer-Accad peoples of Mesopotamia have left us richer archaeological evidence of their worship system than Egypt. The stone and clay inscriptions, as well as literary tablets uncarved in such temple libraries as that at ancient Nippur (southeast of Babylon), some of which are now shown in the University Museum at Philadelphia and in Istanbul; and the *Tell Farih* tablets dating, says Albright, from c.2700 B.C. with lists of 700 gods in central Babylonia; and the thousands of clay tablets from Lagash (twenty-sixth century B.C.)—all indicate details of Babylonian cults and matters of temple administration. Further Mesopotamian wealth of evidence about their worship ways is in the form of stone foundations indicating ground plans of temples at Erech on the Euphrates south of Nippur, and at Tepe Gawra (near Nineveh and Khorsabad) from the fourth millennium to the second century B.C. (illus. 208).

S. N. Kramer's *Sumerian Mythology* presents convincing new evidence of the influence exerted on the entire Near East by Sumerians entrusting to clay tablets, in the third millennium B.C., concepts about the origin and organization of the universe, the slaying of the dragon, the relation of agriculturists to farmer and shepherd gods.

You may see, in the University Museum at Philadelphia, a Mesopotamian terracotta god, portrayed in his clay shrine made at Tepe Gawra prior to 3000 B.C. The god is holding his hand to his mouth, as if to amplify an oracle or bit of wise advice.

Religious festivals celebrated in Babylon at the New Year season late each April help us date the probable time of the Babylonian-born Zerubbabel's departure from this city to return and to rebuild the altar of his Hebrew faith at Jerusalem. He seems to have set out late in April, 521 B.C., as Ezra did about sixty-three years

later. These Near Year festivals were times of clemency from the king, when exiles were granted privileges.

CANAANITE FERTILITY-GODS AND PANTHEON

Fertility cults were common to Mesopotamia, Canaan, and Egypt. Nowhere had they a tighter grip than among Canaanites, into whose midst the Hebrews immigrated from c.1290 B.C. and earlier. From Canaan these rites spread into southwest Asia and Phoenicia, and into Egypt, which already had a large crop of indigenous fertility-gods. The Temple of Dagon in Philistine Ashdod figures in the ark narrative of I Sam. 5:1-5.

In considering the influence of Canaanite religion upon Israel, it is well to recall that, as Albright points out in *From the Stone Age to Christianity*, Chapter V, Palestine at the time of the conquest had three types of citizen: Hebrews who had lived there since patriarchal times, "pre-Israelite Hebrews," he calls them; Israelites proper, coming up from Egypt under Moses; and Canaanites, Semitic cousins of the two other groups. The hill country of central and northern Palestine had already begun to be occupied by Hebrews before the descendants of the Joseph tribe arrived from Egypt. This occupation brought them into the tight grips with the deeply entrenched religion of the Canaanites.

Albright points out: "It was fortunate for the future of monotheism that the Israelites were a wild folk, endowed with primitive energy and ruthless will to exist, since the resulting domination of the Canaanites prevented the complete fusion of the two kindred folk which would almost inevitably have depressed Yahwistic standards to a point where recovery was impossible. Thus the Canaanites, with their orgiastic nature-worship, their cult of fertility in the form of serpent symbols, standing stones, and gross mythology, were replaced by Israel, with its nomadic simplicity and relative purity of life, its lofty monotheism, and its severe code of ethics."

The new Hebrew settlers in Canaan had not only to develop their own national faith, but to resist tempting incur-

sions of religious practices already established in the land west of Jordan among their apparently successful enemies. Inveighing against the favorite high places, examples of which have in our day been excavated at Petra, Beth-shemesh, and elsewhere, the Deuteronomic law commanded destruction of all the cultic high places upon mountains where the dispossessed nations had served their gods, with triclinia, or festival dining halls, and offering tables, "upon the hills, and under every green tree." "Break down their altars, and dash in pieces their pillars [terebintils], and burn their Asherim with fire; and ye shall hew down the graven images of their gods," the Deuteronomic law commanded (Deut. 12: 3, 4).

This allusion to high places, wooden Asherim, and pillars (or obelisks) carries us into the heart of one of the worst apostasies Israel had to meet. The religion of the Canaanites was rooted in a worship of cultic pillars and cones associated with sex in many lands of the eastern Mediterranean. From Joshua to Hosea, Israel continued to go "whoring from . . . God" (see below, pp. 453-54).

Early in their years of conquest of Canaan, the Hebrews possessed definite laws against making covenants with the Canaanites, Amorites, Hittites, and other peoples they sought to succeed. They were to refrain from mixed marriages, lest apostasy follow. Jehovah was their one God. They were His unique people. No other nation had a covenant with Jehovah. This covenant provided protection in Canaan as it had en route from Egyptian bondage. But the loving-kindness of Yahweh exacted the keeping of his commandments "to a thousand generations." Religion and personal morality were combined in the Hebrew code, as in no other code of Bible lands. The demand of Jehovah for a man's best self and his entire self made the religion of early Israel distinct from the cults of their neighbors.

El was the greatest of Canaanite gods, creator of the whole earth, controlling storms and weather, ordering erection of new shrines, judging and ruling men. As Albright states in Chapter 3 of *Archaeology and the Religion of Israel*, El had three wives or consorts: the highly in-

fluential Astarte, Asherah, and Baaltis. Baal, son of Asherah, a word meaning "master" or "lord," was chief of a group of lesser Baals of local authority. Baal, or Hadad, was called in the Ugaritic texts the son of Dagon, god of grain; both had influential temples at Ras Shamra. See below, page 456. Baal was very influential, also, at Ashdod, a Philistine coastal city. Aliyan, a god of springs, wells, and waterways, was a son of Baal. Kousor or Kautihar and Hasis were artisan-gods who built temples and fashioned gold and silver tools for shaping cult objects.

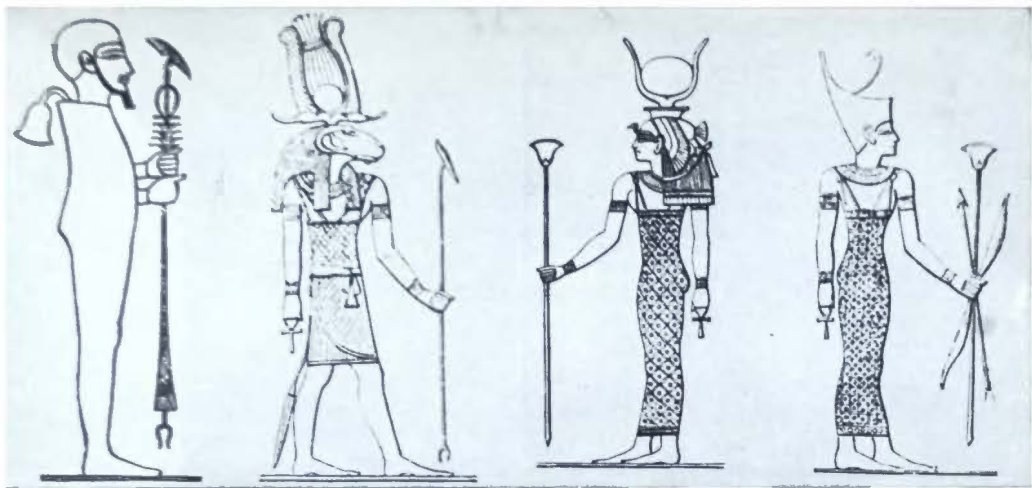
Astarte, a virgin yet pregnant goddess, had a famous center at Byblos on the coast between Tripoli and Berytus (present Beirut). She and her colleagues excelled in matters of sex and war. They were immensely popular at temples where sacred prostitution was a legalized vice.

A north Syrian goddess called Atargatis, consort of Hadad, was the Dea Syria, says Rostovtzeff. Her temples rivaled those of Isis in Egypt and those of the Anatolian Great Mother. Atargatis had temples at Baalbek, Palmyra, and Damascus.

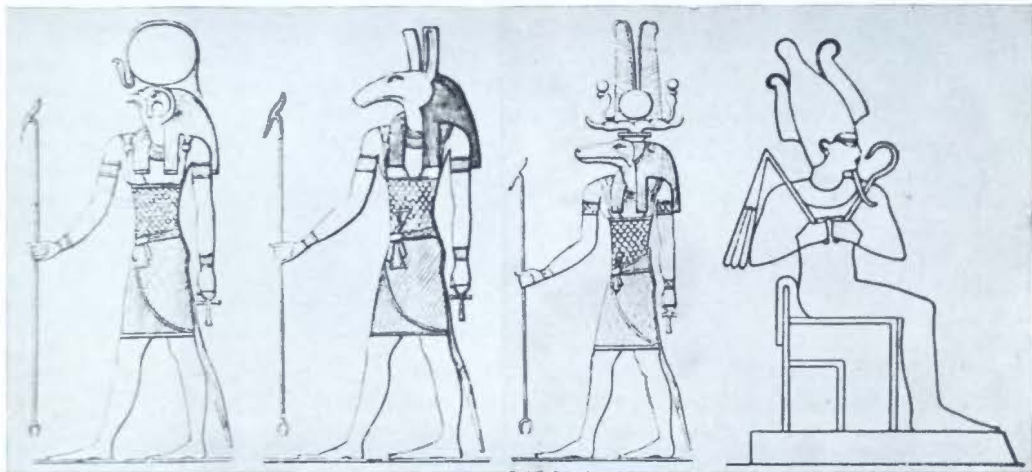
There were scores of other Canaanite gods, including the Tyrian Baal whose resurrection was celebrated each spring on the coast. People at Tyre honored, also, Melcarth (Melkart) against whom the Hebrew Elijah protested in the ninth century B.C. Koshar was the Vulcan of the Canaanites, and the shepherd-god was Hauron. Mot was the god of death and sterility. The Ras Shamra texts make no mention of the sun-god Shamash, popular in Mesopotamia, but they speak of a sun-goddess Shapash. The planet Venus, says Albright, called "Astarte" among Canaanites, was female in the evening and male in the morning. Canaanite gods were "fluid" as to names, personalities, and even sex.

Priests of Baal lived among the field workers, even as Hebrew prophets dwelt high among their denuded hills (see below, p. 455).

A dramatic tableau which summarizes the chief traits of Canaanite worship appears in illustration 238. It shows a clay cult stand found outside an Asherah shrine at Beth-shan of the thirteenth century, when Israel was arriving in Canaan and es-



239. Group of Egyptian gods: Ptah, Knum, Hathor, and Neith. (*"When Egypt Ruled the East,"* Steindorff and Seele, University of Chicago Press)



240. Egyptian gods: Ra, Seth, Sobek, and Osiris. (*"When Egypt Ruled the East,"* Steindorff and Seele, University of Chicago Press)

241. At Paestum (Poseidonia of the Greeks) founded 500 years before Christ, a fifth-century Doric temple of Poseidon (center); and an archaic basilica (right), divided into two halves for worship of dual divinities, are surviving Greek monuments in modern Italy.



242. Statue of the many-busted Diana of the Ephesians, from Ephesus in Asia Minor, now in Naples Museum. Of marble, alabaster, and bronze, this portrayal shows the lewd goddess against whose worship Paul contended (Acts 19:23-41). Note the symbolic fertility-cult animals carved on her gown.

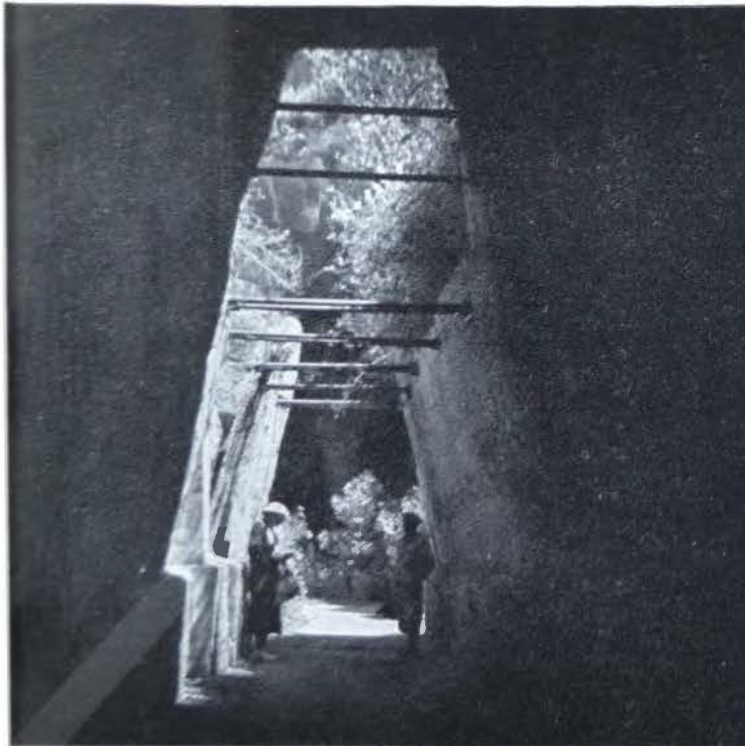


243. "Temples made with hands," seen on the Acropolis from Mars Hill, Athens, where Paul addressed the Areopagites (Acts 17:22-31). Right, the small Temple of Wingless Victory; center, the Propylaea; left, the top of Erechtheum. Americans are participating in an informal worship service on this historic hill.





244. One of three Canaanite-Egyptian temples in the fosse at the base of the fortress mound of excavated Lachish (Tell ed-Duweir), southern Palestine. This shrine, built between 1475 B.C. and 1223 B.C., consists of three or four small rooms. The altar is attached to the south wall. Bench for offerings. Hearth in the floor.



245. Unique trapezoidal gallery 300 ft. long, through solid tufa above the Mediterranean at Cumae, leading to the Cave of the Cumaean Sibyl, one of the secesses of the ancient Greeks. Vast underground passageways, suggesting Virgil's hundred entrances and exits from the cave, gave this cultic shrine an air of mystery.

tablishing permanent homes there. Note the nude goddess seated in lewd posture. She holds her two symbolic doves. See the two warring male deities, with a dove at the feet of one. Notice the advancing serpent, symbol of fertility, and the lion of power slinking along the side of the shrine. Imagine such crude glorification of prostitution in the name of religion, and you gain an idea of the Syrian and Anatolian cults met by the Israelites moving up from Egypt to possess the land.

When Philistines fastened the bodies of the defeated Hebrew King Saul and his son Jonathan on the walls of Beth-shan and hung their armor in "the house of the Asharoth" at the same fortress where, a century or more before, this clay cult stand was used, they heaped ignominy upon them. Honor is due the brave men of Jabesh-gilead who marched to remove the royal bodies to a suitable grave under a sacred tamarisk tree (I Sam. 31:8-13).

In contrast to the prevalence of lewd female figurines in Syria and Palestine during the centuries of the conquest, and to their presence in the average Hebrew's home, place this Deuteronomic law codified in the interests of purity of life and monotheism of faith, which began with Moses and continued through the prophets: "Thou shalt not plant thee an Asherah of any kind of tree beside the altar of Jehovah thy God. . . . Neither shalt thou set thee up a pillar [obelisk] which Jehovah thy God hateth" (Deut. 16: 21, 22). Note the stress upon "Jehovah thy god's" hatred of the cultic figurines. Israel's conscience was being tutored in the spiritual refinements which made them unique among their neighbors. To date, no cultic representation of a male god or any likeness of Jehovah has been found in an excavated Jewish home from Old Testament times, although plenty of female cult depictions have turned up. Obedience to the second commandment was too deeply imprinted to allow such cultic portrayals of the one true God of Israel. After the thirteenth century even female figurines became more rare in Hebrew homes, as Canaanite influences declined.

The cultic figurines and sex symbols prevalent in Bible lands, with the actual ap-

proval of temple staffs, may be compared with the lewd scribblings in public places today by modern youths deficient in moral and religious education.

Veneration of Astarte or Venus on the Syrian coast continued until the Christian Emperor Constantine in the fourth century A.D. destroyed the Venus and Adonis cult centers, the only pagan shrines he did order abandoned here. Perhaps he took courage from the protests Paul had uttered almost 300 years earlier against the groves of sacred prostitution at Antioch.

We give due credit to the religion of the Canaanites for its ennobling influence upon sacred Hebrew literature, especially on the poetic form of many Old Testament portions, and upon temple architecture and sacred music. But we have only to consider the lewd Asherim, or female figurines, with exaggerated emphasis on bust and abdomen, to realize the lofty towering of Israel's faith above that of the Canaanites (illus. 238). As G. Ernest Wright once said in the *Biblical Archaeologist*, the differences are more remarkable and significant than the affinities, and in the accounting for these differences, we discover Israel's great contribution to world history: a monotheistic religion, centering in one supreme God concerning Whom there is no mythology of wars, loves, or heroic deeds as among gods of pagan neighbors.

PILLAR CULTS

Fallen pillars, to which we have referred, sometimes prove to have been supports for roofs, as at Solomon's Stables at Megiddo, Tell el-Hesi, Taanach on the Plain of Esdraelon, and Bab edh-Dhra in Moab. Again, man-made pillars have a distinctly cultic value, as at Gezer and at Ader in Moab, Albright points out, concerning stone vestiges from the third millennium B.C. To such we have made several references. The *massebah* represented the male element in cultic rites. The female element was also represented by an object worshiped at Asherah shrines.

For a detailed discussion of pillar cults in Petra, rock-cut city controlling Edomite caravan routes, see Margaret Murray's

Petra. Discussing the Jacob narrative of Gen. 28:18-22, she stresses the antiquity of stone worship and of the belief that not only was deity to be worshiped by sacrifices before sacred stones, but that a god actually resided in the holy stone. This "stone which I have set up for a pillar," said Jacob, "shall be God's house: and of all that thou shalt give me I will surely give the tenth unto thee" (Gen. 28:22).

On high places explored at Petra, black cuboid stones have been found set up in niches. Many depictions of such stones were scratched on the rocks here. The godhead was thought to reside in such and to him were presented the elaborate sacrificial offerings served in the rock-hewn triclinia, or sacred dining rooms, with couches for participants in the sacred meal and the phallic cult. This cult crept even into the Tabernacle and Temple of the Hebrews, despite prophetic protests.

EGYPTIAN DEITIES

Egypt emphasized fertility-gods and sent her Isis, counterpart of Astarte, as far west as Italy, where in Pompeii the ruins of the well-known little Temple of Isis persist. Rome, too, bowed to this popular Egyptian goddess. Sometimes the earth-goddess in Egypt became *Hathor*. For there was constantly a flowing of names and traits.

Breasted, in *Ancient Times*, highlights the affection of ancient Egyptians for their god *Osiris*, patron of agriculture, consort of Isis and father of the young god *Horus*, who became successor of Osiris when the latter became god of the underworld. Memphis was the grain bin of Osiris (see Isis, Osiris, and Horus on scarab, illus. 150).

So influential was Osiris that Egyptians also associated him with the watery floods which quickened agricultural life along the Nile. No wonder farmers honored Osiris while the priests worshiped the state faith of the sun-god *Amun-Ra*, or *Aton*. Egyptian kings added the names, *Ra* and *Osiris*, to their titles, sometimes both at the same time. They recognized that their kingdom depended upon agriculture.

The indispensable sun-god, *Amun-Ra*,

was chief deity for centuries. *Ra* was depicted as having a hand at the end of each sun ray, extending good gifts to the children of men. In certain dynasties, the Pharaohs were believed to incarnate *Amun-Ra*. When state religion changed its alliance from *Aton* to *Amun*, as it did with *Tut-ankh-amun*, an entire shift of social and religious setup ensued. *Aton* was the cosmic god favored by *Akhenaton*, the spiritual monotheist among Egypt's rulers.

The Egyptians were so grateful for the produce of their life-sustaining fields that they prepared little clay models of every stage of agriculture to accompany them to the Fields of Blessedness. Not even the farm helpers were forgotten. In the University Museum at Philadelphia there is an interesting magical spell, written long ago in Egypt and addressed to the little statuettes of faience, wood, or stone, called *shawabti*, who with mattock, hoe, and seed bag went into the landsman's tomb to till for him eternally. It reads: "O thou *Shawabti* figure, if so-and-so is appointed to do any work in the underworld . . . as a man doing his duty, 'Here am I,' thou shalt say . . . if he is appointed to till fields, to irrigate dry land, transport sand from west to east or vice versa, 'Here am I,' thou shalt say."

James H. Breasted, in *The Dawn of Conscience*, indicates an Egyptian source of influence for the "ladder set upon the earth, and the top of it reached unto heaven," which features Jacob's vision at Beth-el (Gen. 28:12). Egyptians early adopted the ladder as symbol of sun-worship.

It would be difficult to list all the gods sacred to Egyptians. Every aspect of nature, every object beheld—animate and inanimate—was thought to be inhabited by a spirit which could choose its own form, occupying the body of a crocodile, a fish, a man, a woman, or a tree.

At Heliopolis, the city of On in the Bible, a company of gods included *Temu*, *Shu*, *Tefnut*, *Seb*, *Nut*, *Osiris*, *Isis*, *Set*, and *Nephthys*, for example. A lesser company of gods in this place included *Am-annu*, *Am-Antchet*, *Am-Het-Serqet*, etc. A glimpse of several Egyptian gods appears in illustrations 239, 240 from *When Egypt Ruled the East*.

In their hieroglyphic inscriptions on obelisks and in their tomb paintings and frescoes, Egyptian artists have left impressions of thousands of deities. The Pyramid Texts mention some 200; 1,200 are mentioned in the Book of the Dead and various other works dealing with the other world. Yet above all this populous pantheon there looms the desire of certain worthy priests to approach a monotheism with a God who is Lord of Heaven. Many Egyptians meant it when they said that their god was one, *neter ua*. Hebrews meant the same when they said, "The Lord our God is one" (Deut. 6:4.) Akhenaten achieved a monotheistic faith which has impressed the world long after his "Glorious City of the Horizon of Aton" at Amarna has crumbled. His faith was better built than his city.

The sun-god cult of Heliopolis, or the city of On known to Moses, has also been called "the first monotheism." It became a bond between Egypt and Syria.

Even modern people are impressed by the Egyptian teaching that the heart is weighed in a scale, against the figure of Maat, or Righteousness. Although the Egyptian concept of sin was one of failure to observe ceremonial laws, with no word for repentance, punishments in the form of retribution or annihilation were clear. For the righteous, space was allotted by strict measuring ropes in the Fields of Blessedness. A supreme reward consisted in riding with the great sun-god in his boat across the sky from dawn to dark. Egyptians pictured their "holy ape-gods" singing praise to Ra at sunrise, and hawk-gods doing the same at sunset, even as ancient Sumerians placed musical instruments, possibly for worship, in the paws of their animal-gods. Desire for immortality in a rectified sort of unending human existence gave rise to mummification among the Egyptians.

One interesting religious concept preserved in the art of Egypt shows the ram-headed, creative god Khnemu fashioning a man on a potter's wheel which he turns with his foot, while behind him stands a figure of the creative god Thoth, notching on a palm trunk the years of the man's life. The potter-god idea is strikingly similar to the metaphor of Third Isaiah:

"O Jehovah, thou art our Father; we are the clay, and thou our potter" (64:8), and to "How many are the days of thy servant?" of Ps. 119:84.

GREEK CULTS

Attic Greeks, who worked out on their mountainous peninsula the most beautiful mythology of ancient Mediterranean peoples, did not exalt on their sacred Acropolis at Athens (illus. 63) Ceres, goddess of grain; or Aphrodite, prototype of the Asherah of the Canaanites. Rather, they honored Athena, goddess of the intellect and of war, as well as of agriculture; and giver to the people of the clean olive tree. They also gave prominence to Nike, whose tiny Temple of the Wingless Victory on the edge of the Acropolis is an ideal specimen of Ionic architecture. This perfect gem was skillfully restored shortly before World War II.

People of Attica reserved for Eleusis, on the road from Athens to Corinth along the Bay of Salamis, the chief sanctuary of the earthy mystery religion whose lofty phases impressed Cicero and were known to Paul, as he made his way from Athens to the isthmian city of Corinth.

The ancient ruins of the Telesterium, or Hall of the Mysteries, are more impressive to students of religion, than the strategic Eleusis air base adjacent. In this famous cultic temple, rites involving Ceres or Demeter, goddess of agriculture, her consort Zeus, ruler of the universe, and their daughter Persephone were based on "things shown" to the processions of worshipers who had first taken part in a solemn assembly at Athens. Then, on the second day, participants had bathed in the sea; on the third, offered a sacrifice; and, on the fourth, had made joyous procession along the old road shown in illus. 198. Reaching their destination at sunset, they moved up and down the shore off the Bay of Salamis until after dark, waving torches, re-enacting the search for the lost Persephone. Near the entrance to the Hall of the Mysteries we have seen carved a symbolic torch. The climax of the rites took place in the Telesterium. We know few details. The initiates never revealed them. But they were as sacred to

mystery cultists as the mass is to Roman Catholics, holy communion to Protestant Christians, and Easter Eve to Greek Christians. Cicero said that nobody could be initiated without becoming a more noble person. Women were permitted to participate. Slaves, Persians, or criminals were not.

Paul may have been familiar with the gist of the Eleusinian mysteries, centering about the "something shown" and the mowing of an ear of corn. For the mystery religion was not suppressed until the time of Theodosius, toward the end of the fourth century A.D. Is there a reflection of Paul's contact with Eleusis in his words to the Corinthian Christians: "Behold, I tell [or show] you a mystery . . . this corruptible must put on incorruption" (I Cor. 15:51-53)? But the most striking carry-over of the Greeks' veneration for the sown and resurrected seed is in the words of Jesus himself, as recorded by John: "there were certain Greeks among those that went up to worship at the feast [last Passover of Christ at Jerusalem] . . . saying, Sir, we would see Jesus." And Jesus, knowing their ability as Greeks to get the symbolism of the resurrected grain, made brilliant use of this metaphor, saying, "Except a grain of wheat fall into the earth and die, it abideth by itself alone; but if it die, it beareth much fruit" (John 12:24).

The influence of Greek and Egyptian agricultural mystery cults spread into Italy. At Pompeii, in the enormous Villa of the Mysteries, one room has walls frescoed with depictions of various stages of cultic ceremonies of Isis or Demeter. We see Demeter with her torch, leading back to the upper world a youth who has voluntarily died and gone to the underworld, to "get salvation" and initiation into the mysteries.

In addition to Demeter, Persephone, and Isis, the Greeks worshiped *Aphrodite*; and *Diana*, twin sister of the sun-god *Apollo*, chaste goddess of the hunt, whose most charming portrayal, once in the Paris Louvre, showed her attired in short chiton, with hand on the antlers of a young fawn and a quiver full of arrows on her back. The beauty of her bare legs and arms is in contrast to the lewd statue

of *Diana of Ephesus*, once in the Museum at Naples; this is the best known portrait of the sensuous nature-goddess which *Diana* became when transplanted to Asia Minor (illus. 242). The Ephesian *Diana*, against whose silver images Paul vigorously protested (Acts 19:23f.), has her thorax covered with four rows of breasts, symbolic of fertility. The front of her garment is trimmed with sequences of lions, goats, and other sacrificial animals; and the sides are adorned with alternate rows of nymphs and sea shells, sphinxes, bees, and roses. Her mural crown, like that of the Asiatic *Tyche*, or "Lady Good Luck," is decorated with the signs of the zodiac denoting the seasons. This tiara is in poor taste, in comparison with the exquisite simplicity of the crescent moon which forms the tiara of the many pure Greek *Dianas* of the Hunt.

Paul met many statues of *Pan*, whom Greeks regarded as representative of all the Greek gods, and even of paganism itself. Poets who witnessed the dawning triumph of Christianity cried out, "*Pan* is dead."

The Apostle, who first carried Christian faith into Europe in the Greek city of Philippi, certainly saw temples dedicated to the other chief members of the Greek pantheon. He decried "temples made with hands," seen in illustration 243, behind the group worshiping on Mars Hill where Paul made the address recorded in Acts 17. Daily at Corinth he beheld the ruggedly beautiful archaic Temple of *Apollo* (illus. 84).

Aegean islands were "peopled" by the same nature-gods popular on the peninsula. The bull-worship of Crete we have already mentioned. And the healing shrines at Cos (see Section 12, Islands).

ROMAN CEREALIA AND SIBYLS

Romans celebrated festivals in honor of the goddess of grain, *Ceres*, and called them *Cerealia*. As early as the fifth century B.C. they maintained on the Aventine Hill a temple adorned by Greek artists. It housed activities divided between corn-trading and worship of the goddess who gave plebeians corn to trade. Here was a curb-market-temple.

Like early Semitic and Greek peoples, Romans consulted oracles of sibylline prophetesses. Most famous was the Cumae Sibyl, believed to dwell in a cave at the summit of the Cumae acropolis, overlooking Puteoli with a colorful vista across islands to gulf and sea. Virgil on the eve of the Christian era romantically described this Sibyl in his *Aeneid*. Illustration 245 outlines the unique vaulting of the tunnel we followed to her grotto. In the early Christian centuries Cumae high place was crowned with a complex of churches and baptistries which had succeeded the old temples to Apollo and Jupiter. A stretch of the well-paved sacred way mounting to the cave is still impressive. It joined a road leading to the Via Domitiana along the shore to Rome and was possibly followed by Paul as he walked from Puteoli harbor to the capital, picking up the Appian Way at Terracina.

Wherever in Italy we meet rectangular temples of the pre-Christian era we know they were influenced by Greek concepts. Temples at Paestum (to Neptune) south of Salerno beach and at Sicilian Segesta are examples. Square ground plans came from Etruscan builders.

MISCELLANEOUS WORSHIP RITES

Human sacrifices have left remains in foundations of homes and temples, where pillars embedded skeletons or where jars under floors have revealed bones of infants offered up, apparently while alive, for appeasement of evil spirits. Matter excavated at ancient Jericho is enlightening in this connection. I Kings 16:34 appears to be a reference to human sacrifice: "In his days did Hiel the Beth-elite build Jericho: he laid the foundation thereof with the loss of Abiram his first-born, and set up the gates thereof with the loss of his youngest son Segub, according to the word of Jehovah, which he spoke by Joshua the son of Nun."

It is difficult to reconcile this drastic sacrifice with our idea of even the Old Testament Jehovah. Does Abraham's willingness to sacrifice Isaac to Jehovah root in this practice?

Cultic cup marks in solid rock at Gezer and Jerusalem and cultic cups set out in

a primitive Aphrodite-Eros shrine on the slopes of the Acropolis at Athens have given rise to many speculations about their use. Some have thought that they were merely devices hollowed out to receive olive oil, as was the case during the period of a large Middle Iron Age olive industry at Lachish in southern Palestine.

Worship of pharaohs, kings, and emperors appears in many chapters of the Bible, down to New Testament times. Altars to Caesar Augustus were reared at Samaria and Caesarea even as altars to emperors were reared in forums of Roman towns known to Paul. In many instances, king and god were synonymous. Egyptian pharaohs as we have indicated, were especially regarded as incarnations of the sun-god or Osiris or some other divinity. "Senwosret I, son of Horus, son of the sun," we read on a Heliopolitan obelisk.

Ephesus was long a center of emperor cult encountered by Paul. As someone has said, the government of Rome always landed at Ephesus. Sorcery thrived there; salacious magical books were destroyed there. Against these and against the cult of the many-busted, lewd Diana Paul threw in his forceful influence. Strolling Jews, like the seven exorcist-sons of a Jewish chief priest, Sceva (Acts 19:13, 14), felt the cold shoulder turned on them by the nervous sufferers they claimed to exorcise. No wonder the Asiarchs in charge of public order urged Paul to leave Ephesus on account of the uproar caused by his moral purging of their corrupt city.

A cult known as "Mithraism" was popular among sailors using the Italian port of Ostia in the time of Paul. Quite near to the theatre (illus. 203) was the Mithraeum, with hall and two galleries for the initiated members who worshiped the rising and the setting sun. Mosaics found there depict the solar diety, the planets, and signs of the zodiac. A statue of Mithras, the Persian deity who fought side by side with Ahura Mazda, god of light, stood at the rear of the hall; and near the entrance is the hole which received blood from sacrificed victims. Mithraism was carried into Italy in the first century A.D. by pirates from Cilicia, home province of Paul. Armies especially favored it. Roman emperors honored the cult. Constantine in

the fifth Christian century destroyed its grip.

ICONOGRAPHY

The expression in art of an idea, a person, or an event forms the subject matter of iconography. Many pre-Christian worship accessories were rich in iconographic symbols. Similarly, in Egypt, the winged sun-disc was the familiar symbol of healing and of life; the goddess Maat (Righteousness) also had outspread wings; and the merry goddess of music and fun appeared as a little dancing girl. The Egyptian ankh, or girdle, was the key of life; the *thet*, a woman's girdle with a longer bow tie in front, denoted Isis. The was was a staff of authority. The *dad*, or small column with superimposed layers, symbolized stability. In Assyrian art, and elsewhere through the Mediterranean, the lion denoted strength, even as the bull denoted physical vigor. In Hebrew religious art, despite the commandment against portraying anything living, decorative use was made of a copper sea, candlesticks, cherubim, lilies, oxen, palms, pomegranates, the six-pointed star, winged sphinxes, and cultic objects. Ancient Sumerians of Abraham's native country favored the seven-pointed star. Minoans used their winding labyrinth, whose outline resembles a chambered nautilus. Greeks employed the symbol of the lighted torch. Ralph Turner, in *The Great Cultural Traditions*, offers interesting iconographic material. Of early Christian iconography there is a wealth of matter, as in Seymour's exhaustive *The Cross in Tradition, History and Art*. For brief treatment, see *My Hobby of the Cross*, by Madeleine S. Miller.

PROPHETIC CLUES TO "ABOMINATIONS"

ELIJAH AND BAAL

From denunciations of current apostasies in Judaea and Samaria by outraged prophets, we picture the degradation of national worship ways. The ninth-century prophet Elijah rebuked the Baal-worship-

ing King Ahab and his Phoenician wife Jezebel, to whom much of the corruption of Jehovah-worship was due, in such stinging tones that "Ahab . . . rent his clothes, and put sackcloth upon his flesh, and fasted . . . and went softly" (I Kings 21:27). Ahab sold himself to do evil "in the sight of Jehovah, whom Jezebel his wife stirred up. And he did very abominably in following idols, according to all that the Amorites did" (I Kings 21:25, 26). The contest on Mount Carmel between the Jezebel-backed priests of Baal and God's prophet Elijah is familiar. This dramatic incident is described in Section 10, Geography, page 228. A solemn assembly of Ahab's Baal-worshipping Israelites, trapped by Jehu and slain as they sacrificed, is vividly pictured in II Kings 10. The cultic pillars or obelisks from the house of Baal were burned and the temple destroyed. This honest effort to uproot Baalism from Israel was made by Jehu in the era of Elijah, probably under the influence of the prophet (876-854 B.C.). Many a reformer-king, such as Josiah, came to the aid of prophetic purists from time to time.

THE ISAIAHS

The First Isaiah (740-701 B.C.), beholding the frightful apostasy of the eighth century, grieved over the golden idols, the work of men's own hands, and the iniquities of new-moon festivals. He challenged his people with the wonderful words of Jehovah, "Come, now, and let us reason together . . . though your sins be as scarlet, they shall be as white as snow" (1:18).

The Second Isaiah (540 B.C.) dwelt on the inanity of idol-worship at Jerusalem, crying, "To whom then will ye liken God? . . . The image, a workman hath cast it, and the goldsmith overlayeth it with gold, and casteth for it silver chains . . . to set up a graven image, that shall be not moved" (Isa. 40:18-20). He encouraged Judah to recognize Jehovah as the first and the last, "besides whom there is no God." Isaiah, instilling positive teachings about Jehovah, says, "They that fashion a graven image are all of them vanity: and the things that they delight in shall not profit." The workmen shall be made foolish, when

of the residue of their fashioned metal they make a god. Yet the patient God redeems the people He has created. He is Israel's husband. His tender affection is like that of a woman for the child she is nursing. His anger is genuine but lasts for a moment, while His love is eternal. "He will feed his flock like a shepherd . . . and will gently lead those that have their young" (Isa. 40:11).

IDOLATRIES OF MANASSEH

The idolatries of Manasseh, vassal-king of Israel under Esarhaddon (692-638 B.C.), recorded in II Chron. 33, are among the most shocking in the Old Testament. They appear all the more horrible following the reign of the good Hezekiah. Manasseh re-erected the heathen high places which Hezekiah had broken down; "and he reared up altars for the Baalim, and made Asheroth, and worshipped all the host of heaven, and served them. And he built altars in the house of Jehovah . . . altars for all the host of heaven in the two courts of the house. . . . He also made his children to pass through the fire" in Moloch-worship, down in the Valley of Hinnom below Jerusalem, and went in for wizardry, augury, and sorcery. He seduced citizens into his ways of wickedness and went even so far as to set up in the very House of God, the graven image of an idol he had made. Manasseh went the limit in his apostasy, and the Chronicler used him for a horrible example. Even after the reforms of Manasseh, the people continued to sacrifice on the high place, but to Jehovah. When worthy young Josiah succeeded to the throne (638-608) he broke down Baal's altars, ground images into powder, "and hewed down all the sun-images throughout all the land of Israel" (II Chron. 34:7).

An interesting reference to Moloch-worship appears in Psalm 106, denouncing the mingling of Israel with nations at pagan worship which became "a snare unto them," as they "sacrificed unto the idols of Canaan."

Yea, they sacrificed their sons and their
daughters unto demons . . .
And played the harlot in their doings.

ZEPHANIAH'S PLEA

Zephaniah (627 B.C.) yearned to have Jehovah triumph over petty Baalistic rivals, to have him "famish all the gods of the earth," and to have men turn to worship Jehovah, "every one from his place, even all the isles of the nations" (2:11). He warned against adoration of astral deities from housetops, against Milcom, and against alien superstitions such as leaping over thresholds after manner of priests of Dagon at their temples. After his plaintive pleading, "seek righteousness, seek meekness," Zephaniah climaxes his message with winsome words: "Sing, O daughter of Zion; shout, O Israel; be glad and rejoice with all thy heart, O daughter of Jerusalem. Jehovah hath taken away thy judgments . . . the King of Israel, even Jehovah, is in the midst of thee; thou shalt not fear evil any more" (3:14-15). These are reassuring words for the faithful in any age.

HABAKKUK AND IMAGES

Habakkuk, part of whose prophecies may date from the Chaldean period of 605-600 B.C., paints vividly the faith of true followers of God against the graven image, "the molten image . . . dumb idols." Things made of stone and wood, overlaid with gold and silver, in which there "is no breath," are in contrast to Jehovah "in his holy temple." The difference summons all the earth to "keep silence before him" (Hab. 2:18-20). It is He that cleaves mountains, lifts the waves of the deep as his horses tread the sea, and makes his people's feet "like hinds' feet . . . walk upon the high places" (3).

JEREMIAH AND JUDAH'S APOSTASIES

No prophet of Israel was in closer grips with the apostasies of Judah than Jeremiah (c.626-585 B.C.), on the eve of the fall of Jerusalem and the carrying away of her choice population to Babylon. He knew "the vanities of the nations" and the dogged persistence of people to offer appeasement gifts to Moloch at Tophet in the Hinnom Valley, to worship the Baalim on their high places with most sensuous rites, and to make cakes for the "queen of

heaven." Yet from these observations he framed his wonderful picture of God as a patient potter making a vessel on the wheels, marring it in his hands, and then shaping it into another better vessel (Jer. 18). "Return, O Israel," cried Jeremiah, "put away thine abominations out of my sight."

ZECHARIAH AND DIVINERS

The author of Zech. 10:2, writing later than the prophet Zechariah who denounced idols, false prophets, and Canaanites between 520 and 518 B.C., inveighed against the man-made teraphim that "have spoken vanity, and the diviners that have seen a lie." (Did they read animal livers as people today read fortunes in tea leaves?) The talking teraphim recall the colossal whispering statue of Memnon at the Theban temple on the Nile, and the oracle-speaking Cumaeon Sibyl in Italy.

EZEKIEL AND "MULTITUDES OF ABOMINATIONS"

Ezekiel, who is thought by many critics to have spent the first six years of his ministry (592-570 B.C.) in Jerusalem, just prior to the fall of that great city of Chaldean might, was the most eccentric of the protesting prophets. It may be that Ezekiel went to Babylonia with the first exiles, in 597 B.C., to the vicinity of Nippur by the river Chebar. His call to prophecy seems to have occurred there (Ezek. 1:2) when he was only twenty or thirty years of age. But he returned to Jerusalem and was in that vicinity until some time between January, 588, and January, 585 B.C. His wife is believed to have been killed by the shock of the fall of Jerusalem. During his earlier ministry in Jerusalem, he condemned high places (Ezek. 7:7), false prophets with worthless proverbs, divinations, and cities like Samaria and Jerusalem which conducted themselves like harlots committing whoredoms with apostate cults (23). Ezekiel, says Robert H. Pfeiffer, considered that Israel's faithlessness had begun in Egypt and continued ever since. Soon after the beginning of his Jerusalem ministry in 592, Ezekiel, in the eighth chapter of his

prophecy, gave vent to a description of the many pagan rites practiced in Jerusalem. Looking at this summary, Pfeiffer states, "The circumstantial description of Ezekiel is one of the most genuinely historical parts of his book and therefore an invaluable source of information on Judaeo syncretism." He sees "the seat of the image of Jealousy, which provoketh to jealousy," perhaps Manasseh's idol (called "Asherah" in II Kings 21:7). Most offensive of all the abominations actually set up in God's sanctuary was a secret room entered through a hole in the wall by the door of the court. "So I went in and saw," says Ezekiel, "and behold, every form of creeping things, and abominable beasts, and all the idols of the house of Israel, portrayed upon the wall round about." Seventy of Israel's elders were standing about, each holding a censer with smoking incense. The elders believed that God did not see their abominations, which included women weeping for Tammuz, as women in New Testament times and later wept for Adonis at the Dog River on the Phoenician coast. Worst of all were twenty-five men facing the east, worshiping the sun-god Shamash, with their backs toward the Temple of Jehovah on Mount Moriah (the sun comes up over Mount of Olives, facing the east wall of the Temple enclosure). This sun-worship suggests the sun cult of Persians, who stood with twigs pressed to their mouths, lest with their breath they contaminate the beneficent sun.

HOSEA AND BAAL

Hosea, writing between c.733 and 722 B.C. (or 750 and 735), laments the faithless people of Israel who do not even know that Jehovah gave them the oil, grain, and new wine which they sacrificed to Baal, and the gold and silver which they made into an image of Baal (Hos. 2:8). The more the prophets denounced their waywardness, the more they turned from these forth-tellers of God's will and burned incense to graven images. "I drew them with cords of a man, with bands of love . . . I laid food before them," Hosea reported to Jehovah. Yet harlot Israel behaved stubbornly. And Ephraim remained joined to his proverbial idols (4:17). Samaria had

calves, ever symbols of young fertility, for idols. Men who sacrificed kissed the calves (13:2).

AMOS AND HIGH PLACES

Amos, the stern desert-dwelling prophet from Tekoa, which is a two-hour donkey jog south from Bethlehem, lived c.760 B.C. He left the simplicity of his shepherd ways and sycamore-dressing career to protest in the capital of the northern kingdom at Samaria against a court that "sat at ease," as blind to the needs of the poor as the imperial Russian regime was to its proletariat in the twentieth century A.D. Amos remonstrated against Canaanitish high places, the shrines of their images, and stars of their gods (5:26). Amos so spiritualized religion that he even regretted Israel's solemn assemblies dedicated to Jehovah, because these involved extravagance of burnt offerings and meal and exuberance of music, when the worshipers should have been letting justice "roll down as waters, and righteousness as a mighty stream" (Amos 5:24).

TEMPLES MADE WITH HANDS

In addition to numerous allusions already made to temples in other sections we suggest the following structures as typical:

AT FORTRESS BETH-SHAN

In the 4,000 years of history uncovered when the giant Mount of the Fortress at Beth-shan, at the eastern end of the Valley of Jezreel, was excavated by the University of Pennsylvania, several significant shrines and temples came to light. They lay in eighteen successive occupation strata which led down to bedrock occupied ten levels before the Hyksos period of Egyptian history. Ground plans of temples which were used in the period between Abraham and Moses have been unearthed. Alan Rowe, an authority on Egyptian temples, believed that he looked into the face of Philistine masonry standing here in the era of Saul the Hebrew. Canaanite temples with at least six sanctuaries have been found occupying five levels and periods.

As we looked into the face of complex jumbles of masonry, we marveled that human skill could ever read the story of these stones. Yet scholars have gleaned much information about the Semitic deities honored at Beth-shan when Egyptian officials stationed here were under strong Syrian influence. Some of the temples were of mud brick and contained recognizable cult objects, such as the truncated cone of a *massebah*, or venerated phallic emblem. C. C. McCown, in *The Ladder of Progress in Palestine*, wonders whether such an object may be referred to in the story of Jacob at Beth-el (Gen. 28:18-22). A shrine sacred to Mekal has been found at Beth-shan, and the collarbone of a bull and a bronze dagger near at hand suggest the last sacrifice before flight of the priests. The Southern Temple of Beth-shan may be the "house of Dagon" mentioned in I Chron. 10:10 as the "house" to whose walls was affixed the head of Saul. Saul's Temple is in stratum V.

AT MEGIDDO PASS

At Megiddo on the Plain of Esdraelon temples have been found covering an even longer period than the ones of Beth-shan. Cult stands with serpent and mother-goddess were found here, and one with a human-headed cherub at each of its four corners suggests the cherubim of the Hebrew ark. A Canaanite altar of incense, in clay, dating from just before the era of Solomon (c.1000 B.C.), has been found at Megiddo. What the authors of this book took for a governor's palace proves to be a temple, with three layers of stone, one of cedar beams, and a superstructure of mud brick.

AT LACHISH: FOSSE AND PERSIAN TEMPLES

At Tell ed-Duweir in southern Palestine, a series of three temples lying out in the fosse, or ditch, at the base of this fortress mound challenges our attention. The altar of one of these appears in illustration 244. These shrines were probably used by bourgeois citizens of the town, for the main temple of the garrison has not yet been excavated. The first fosse temple was

built between c.1475 and 1400 B.C.; the second, between c.1400 and 1325 B.C.; and the third, between c.1325 and 1223 B.C., as indicated in the scholarly report of Olga Tufnell and Charles Inge based upon study of masonry layers and accompanying objects.

These temples were erected in a time of relative security, after the Egyptians controlling this site on the border of Palestine had driven out the Hyksos from their land c.1578 B.C. The temple consisted of three or four small rooms, as you can see in our picture of the little sanctuary at the foot of the mound of the city. The altar, attached to the south wall, had a bench on which objects of worship were placed and a hearth in the floor. No objects of worship were recognized. But in storage places were found huge deposits of scarabs, cylinder-seals, glass and faience vessels, carved ivories, necklaces, bone figurines, and a great array of decorated pottery, including cooking pots, dipping flasks, bowls on stands, and early lamps, which were merely saucers with pinched lids. Some of the hidden offerings were already old when the temple was destroyed.

There is evidence of worship here at Lachish of a Syrian triad, including Reshaf, a Syrian god of war and storms; Elath; and the mother-goddess. Students of the Bible are interested in certain parallels between the Lachish temples and those of the Hebrews. In both, altars were of earth or mud brick, or unhewn stones. Ceremonial offerings of flesh, cakes, and incense were presented. But there was at Lachish no Holy of Holies where priests received offerings. At Lachish the worshipper himself brought his gift in a bowl, which he broke, after the Hebrew custom. Lachish people and Jerusalemites alike offered especially the right foreleg of a young animal, bones of which have been found near the fosse temples. Also, the small chamber of Lachish Temple I has a room in which the priest slept, even as I Sam. 3 indicates that the sleeping-place of young Samuel and Eli, guarding the Hebrew ark at Shiloh, was adjacent to the shrine.

At Lachish, too, we have photographed a little oblong Persian temple approached by six steps leading to an antechamber

and three inner shrines needed for the sun-worship ritual. A raised platform in the innermost room faced the rising of the sun. Two altars and a bronze lamp were among the finds here. As we walked up the simple steps, we were impressed by this little chapel of foreign administrators—"almost monotheists"—who in c.1000 B.C. centered their faith in Ormuzd, or Ahura Mazda, god of light. Zoroaster, founder of a great Persian religion, was a Mede, who first offered his beliefs to his own people. The Medes rejected those beliefs, but they were accepted by the Iranians. A legend told by Breasted claims that Zoroaster gained entree to the Persian worshippers by curing a king's favorite horse which had been afflicted. Before 500 B.C. Zoroaster's noble faith in a god who was "Lord of Wisdom" and desired every man to live in the light of goodness became the state religion of Persia. Zoroaster was the first to emphasize a "last judgment"; this doctrine appeared in Asia in the same era when Nebuchadnezzar was besieging the land which gave the world its Bible.

SOME SYRIAN TEMPLES

To the jumbled complex of temples at Syrian Baalbek we have already referred (p. 100). Their origin antedated the patriarchs, and their development continued for centuries after Jesus.

René Dussaud has described two important temples in the north Syrian coastal city of Ras Shamra, which has in our generation revealed a wealth of material about the Canaanite religion and its influence on Hebrew worship ways. The Temple of Baal, he says, had an interesting form, with a naos or a pronaos and a court where the altar stood, approached by two steps. In the naos was a base which had supported an image, either of an animal or of a god. A court surrounded this little temple. According to an Egyptian stele, it was built in the Eleventh or Twelfth Dynasty of Egypt and was famous before the era of Senwosret II (1906-1887 B.C.). For at this period an Egyptian princess or secondary wife of Syrian birth presented to her home temple at Ras Shamra a likeness of herself.

The Temple of Dagon at Ras Shamra

was similar in plan to that of Baal. The important Ras Shamra tablets give an outside commentary documenting the primitive civilization of Israel and its cults. In them we are able to trace the "cultural and political rupture from Canaan under the name of Moses," says Dussaud, and to give an early date to the development of religious practices under Moses. There is a similarity between the Canaanite hero Keren and the Hebrew patriarch Abraham. Both are promised "a large country." Neither has a son until he is advanced in age. The system of Canaanite sacrifice is akin to that of the Hebrews if we substitute Yahweh for Baal. Canaanites, Dussaud points out, installed themselves at Tyre and Sidon in the third millennium B.C., reached Ras Shamra in northern Syria by the second millennium, and later built up a trade with Red Sea peoples. Canaanites were writing as early as the fourteenth century B.C. Yet, as Albright indicates in *Archaeology and the Religion of Israel*, "the God of Israel was so far superior to the gods of the pagans (Canaanites) both conceptually and ethically, that theological borrowing from Canaanite sources was scarcely thinkable—at least until much later times, when the elements in question had become dissociated from their crude polytheistic background."

TYPICAL EGYPTIAN TEMPLES

Egyptian temples were, as Harold H. Nelson points out in an article in the *Journal of Near Eastern Studies*, Volume 2, January, 1943, community centers for worship. There national history was taught; there citizens were trained to get a duly impressive perspective upon their own pharaoh. The pharaoh kept himself in the limelight as the embodiment of the greatness of Egypt and protector of his subjects against barbarian intruders. He gave them happy security and kept his own ego dominating their lives in such a way that they would not dream of tossing him aside.

A typical temple at Memphis in the Delta had an impressive guard of honor in the form of rows of alabaster sphinxes, one survivor of which remains under the

palm trees where heifers graze today (illus. 41).

Usually the approach to a temple was flanked by massive pylons or truncated towers forming a gate from which pennons waved. The roomy temple court was surrounded by a colonnade which grew to be the characteristic hypostyle hall, leading to the rectangular room of the god with sub-chapels and rooms for the staff of priests. The interior of the gloomily impressive hall was decorated with reliefs showing processions bearing gifts to the king. The columns of capitals were often carved with lotus buds (see illus. 117, lotus and its stem which suggested this column) or the open flower of a papyrus stalk. The stone structure was richly colored. Light entered from high apertures in a clerestory. Sometimes the likeness of the temple's main god left its quarters on a platform with rollers, pulled with ropes by slaves.

The temple at Tell-el-Amarna built by the young monotheistic reformer, Akhenaton, was, as Pendlebury points out, something new in Egyptian temple architecture. It was a true sanctuary to the sun: airy courts open to the sky followed one another until the worshiper came at last as far as the high altar. On platforms there were little booths where people could buy offerings of food, as we have seen people buying amber prayer beads at booths in mosque courts of Turkey. Offerings were set in the midst of the court, surrounded with rooms open to the blue sky of Egypt. The final sanctuary was so simple as to appear "old-fashioned." More pylons, causeways, offering tables, and statues of Akhenaton crowned with emblems of upper and lower Egypt led to the ultimate altar court by two turns, to shield the holy of holies from public view.

In the Egyptian temple at Medinet Habu near Thebes there are storytelling pictures of Ramesses III (c.1195-1167 B.C.) checking foreign invaders arriving by ship from the north. Here is one of the finest examples of how Egypt's history was written into her temple fabric. From such records we glean most that we know of what was going on in Egypt during Bible times.

There is in the Cairo Museum a famous sandstone shrine from the mortuary temple

at Deir el-Bahri, founded by Hatshepsut, aunt and co-regent of Tuthmosis III who conquered Palestine and Syria (reigning c.1482-1450 B.C.). This 3,400-year-old gem contains one of the best representations of an animal from antiquity—a powerful Hathor between whose horns stands the sacred sun-disc. The goddess stands under the protecting head of the bull at whose side Tuthmosis III is at worship. The original chapel of which this small shrine was a part had been constructed in a cave by Tuthmosis III but was brought to Deir el-Bahri by Hatshepsut, who believed that she had been suckled by the divine Hathor in that cavern above Thebes.

In her *Side Notes on the Bible*, Lady Hilda Petrie tells of Sir Flinders Petrie's excavation of a temple and a sanctuary-hill built in the flat Delta by Jews banished c.154 B.C. from Jerusalem by the High Priest Onias. This temple, described by Josephus, was in the district of Heliopolis, not far from Memphis. It was built of massive stones to a scale about one-half that of the Jerusalem Temple and, of course, was much less elaborate. It had the same divisions: a porch, a holy place, a most holy place. The fabric attempted to copy even the enclosure and walls of the original on Mount Moriah, with a citadel designed after Antonia Castle. The Petries found several objects of Palestinian origin: a ram's horn for the sacrifice, non-Egyptian cornices, a fir-cone from Lebanon, etc. The whole seemed a pathetic effort of the Jews to "sing the Lord's song in a strange land."

RELIGIOUS FESTIVALS

In Section 2, *Animals*, and Section 16, *Nutrition*, we have referred to Hebrew religious festivals.

Most of these were timed by seasons of the agricultural year. Several of the ones included in the holiness code of Lev. 16 and 23 were of ancient origin. The holiness code, Pfeiffer believes, was a portion of the divine oracle spoken through Moses, written probably after the destruction of Jerusalem in 586, with allusions to the Babylonian Exile.

A simplified list of the chief Hebrew religious festivals follows. Many of them

were influenced by Canaanite agricultural feasts.

1. The Sabbath, observed not necessarily at the Temple but at the local synagogues of the postexilic period, and in homes (Ex. 34:21).

2. The Passover, on the fourteenth day of the first month of the ecclesiastical year, Nisan (March-April). Originating possibly in an ancient lambing festival, it took over the Festival of First-fruits of the barley harvest.

3. The First-fruits, in which a sheaf of grain was presented at the beginning of the harvest, before anyone ate of the new crop.

4. Pentecost, or Feast of Weeks, fifty days after First-fruits. Leaven may be used in bread for this festival, since "haste is not necessary" as on the hurried eve of the departure from Egypt.

5. The Festival of Trumpets, held with simple ceremonies and synagogue attendance at the autumnal beginning of the civil year.

6. The Day of Atonement, the "Day of Days" to orthodox Hebrews. Its ceremonies and exactions are described in Lev. 16. These include sin offerings, the cleansing of the altar of burnt offering, and the sending away into the wilderness of the scapegoat laden with people's sins. The Day of Atonement falls in September-October, on the tenth day of the seventh ecclesiastical month.

7. The Festival of Booths, or Tabernacles, observed at full moon in Tishri, the seventh month (September-October). For this joyous festival of ingathering of crops, families tented on roofs and remembered their days of nomadic life. The ceremony closed with a "solemn assembly." See Neh. 13:12-14. Grain, grapes, and olives were "ingathered" and used as offerings to God. Deuteronomy 16:13-16 stresses the joyousness expected of participants in the Feast of Booths at threshing-floors and wine presses: "Thou shalt be altogether joyful." All cares are for the moment to be cast aside in celebrating the generosity of God. Moreover, every man was expected to give "as he is able, according to the blessing of Jehovah."

8. The Feast of Purim, celebrating events narrated in the Book of Esther con-

cerning the deliverance of the Jews from Persians. It occurs in the month Adar (March) on the fourteenth day. Its name may spring from *pur* (plural *purim*) meaning "lot," although this word has not yet been identified in a known language.

9. *The Feast of Lights*, observed about December 25. It commemorates the restoration of worship at the Temple after its desecration by Antiochus Epiphanes (168-165 B.C.) in the period of the Maccabees. New grapes are a feature of this festival.

Many minor local feasts are maintained in Bible lands today. An impressive one is that held by Greek Maronites high up among the cedars of Lebanon, at Bsherrah. Participants pride themselves on the fact that "the Lord himself is honored here—no saint or wely."

"IN THE FULLNESS OF TIME" . . . CHRIST

When we place the cults against which the monotheism of Judaism and Christianity at last prevailed alongside the "abominations" against which Hebrew prophets protested from the ninth through the fourth century before Christ, we marvel that God's pure purpose continued to burn through obscene darkness. Daniel, the latest book of the Old Testament, credits Nebuchadnezzar, who had tested the faith of the prophet's three Jehovah-trusting friends in the Iraqi oil blaze at Babylon, with saying, "There is no other god that is able to deliver after this sort" (Dan. 3:29).

Nelson Glueck remarked concerning the swinging away of the course of war from Bible lands in 1943, "Another year has passed, and with it, the threat of invasion of Palestine by the barbarians. The danger they threatened was averted by the grace of God."

Only by the grace of God has man reached even his present small measure of understanding of the power, the love, and the new world order of the Eternal.

"In essentials," says Albright, "orthodox Yahwism remained the same from Moses to Ezra." It had to triumph over many crises between the primitive simplicity of religion in the era of the judges and the

high cultural level attained by Judaism in the fifth century B.C., after the return from Babylonian Exile.

This orthodox Yahwism, Jesus inherited. Yet in the establishing of his Kingdom as "an everlasting kingdom" and the creating of a spiritual dominion to last from generation to generation, the living Christ made all things new. He became the innovator of a faith in which he presented such revolutionary teachings as: "I and the Father are one" (John 10:30); "Even as the Father knoweth me . . . I know the Father" (John 10:15); "All things whatsoever ye would that men should do unto you, even so do ye unto them" (Matt. 7:12); "Love your enemies" (Matt. 5:44); "Ye, therefore, shall be perfect, as your heavenly Father is perfect" (Matt. 5:48); "God is a Spirit; and they that worship him must worship in spirit and truth" (John 4:24); "He that hath two coats, let him impart to him that hath none; and he that hath food, let him do likewise" (Luke 3:11).

Jesus, having heard John the Baptist call him "the Lamb of God that taketh away the sins of the world," accepted this appraisal. He was messenger and Son of God. He was "the sun of righteousness with healing in his wings."

In the time of Jesus there were worshipful people in Judaea and Galilee who became the first Christians. Such, for example, was "a man named Joseph, who was a councillor, a good and righteous man (he had not consented to their counsel and deed), a man of Arimathaea, a city of the Jews, who was looking for the kingdom of God" (Luke 23:50, 51ff.). In the same group were "the women, who had come with him [Jesus] out of Galilee" (Luke 23:55), and the "devout women of honorable estate" who heard Paul at Antioch of Pisidia (Acts 13:50). There were occasions when "almost the whole city"—here, there, and wherever Paul preached—"were gathered together to hear the word of God." From such crowds there must always have been a few who, brought into an expectant mood from perusal of the Hebrew prophecies, became followers of Christ's Way. The swarthy Ethiopian eunuch of Queen Candace, instructed and baptized by Philip on the

dusty road between Jerusalem and Gaza, is an example of the first Christian neophytes. And always at the Temple there were such sincerely devout aged worshipers as we find in every Christian church today the world around, people to whom worship is food and drink and life. Such a woman was the aged prophetess Anna, "who departed not from the temple, worshipping with fastings and supplications, night and day" (Luke 2:36, 37). And such a man was the father of John the Baptist, Zacharias; as he was taking his turn ministering in the Temple and burning incense to God, the promise came that he should be parent of the "prophet of the Most High," who would come to his longing race as the lovely "dayspring from on high," to guide their feet into the way of peace.

The earliest Gospel was written to satisfy curiosity concerning Christ, on the part of those who had already realized God through their experience of the resurrected Lord and wished to learn something about the historic Jesus.

The living Master of the first Easter

became the cornerstone of the greatest new world order ever revealed to confused peoples. To his few faithful disciples on that amazing day came a sense of greater fellowship with the eternal Christ than they had ever known in the days of warmest fellowship with him in the flesh. All other considerations sloughed themselves off as unessential. Temple, synagogues, temptations to revert to primitive folkways, pillars, incense to Baal, adoration of the Ashtoreth, cultic springs—these dropped into oblivion in the presence of their majestic Lord. Christians found themselves at the crest of the long climb from a monotheism antedating Moses in the wilderness to an identity with the body of Jesus through participation in the Eucharist. They were on their way to discovering what Paul discovered and shared with the "foolish Galatians" (2:20): "I have been crucified with Christ; and it is no longer I that live, but Christ liveth in me: and the life which I now live in the flesh, I live in faith, the faith which is in the Son of God, who loved me, and gave himself up for me."

ADDITIONAL BIBLE REFERENCES

"Jehovah hath chosen thee to build a house for the sanctuary: be strong, and do it" (1 Chron. 28:10)

"Take these vessels, go, put them in the temple that is in Jerusalem" (Ezra 5:15)

"Jehovah, who shall sojourn in thy tabernacle (or tent)?

Who shall dwell in thy holy hill?

He that walketh uprightly, and worketh righteousness,

And speaketh truth in his heart"

(Ps. 15:1, 2)

"Because of thy temple at Jerusalem,
Kings shall bring presents unto thee"

(Ps. 68:29)

"How amiable are thy tabernacles,
O Jehovah of hosts!

My soul longeth, yea, even fainteth, for
the courts of Jehovah" (Ps. 84:1, 2)

"Whoso of all the families that goeth not up unto Jerusalem to worship the King, Jehovah of hosts, upon them there shall be no rain" (Zech. 14:17)

"We saw his star in the east, and are come to worship him" (Matt. 2:2)

"Get thee hence, Satan: for it is written, Thou shalt worship the Lord thy God, and him only shalt thou serve" (Matt. 4:10)

"And on the sabbath they rested according to the commandment" (Luke 23:56)

"They worshipped him, and returned to Jerusalem with great joy: and were continually in the temple, blessing God" (Luke 24:53)

"they also went unto the feast" (John 4:45)

"Ye search the scriptures . . . come to me, that ye may have life" (John 5:39)

"If any man be a worshipper of God, and do his will, him he heareth" (John 9:31) objects of your worship, I found also an altar with this inscription, TO AN UNKNOWN GOD" (Acts 17:23)

"For as I passed along, and observed the

BIBLIOGRAPHY

- Albright, William F., *Archaeology and the Religion of Israel*, The Johns Hopkins Press, Baltimore.
- , *From the Stone Age to Christianity*, The Johns Hopkins Press, Baltimore.
- Baikie, James, *Sea Kings of Crete*, A. and C. Black, Ltd., London.
- Breasted, John H., *The Dawn of Conscience*, Charles Scribner's Sons, New York.
- Broneer, Oscar, "Hero Cults in the Athenian Agora," *Hesperia*, Vol. XI, Num. 2, April-June, 1942.
- Budge, E. A. Wallace, *Guide to the Egyptian Collections in the British Museum*, London.
- Burrows, Millar, *What Mean These Stones?* American Schools of Oriental Research, New Haven.
- Caiger, Stanley, *Bible and Spade*, Oxford University Press, Oxford.
- Dussaud, René, *Les Découvertes de Ras Shamra et L'Ancien Testament*, Geunther, Paris.
- Garstang, John, *The Heritage of Solomon*, Williams & Norgate, Ltd., London.
- Haves, William C., and Herget, H. M., "Daily Life in Ancient Egypt," *National Geographic Magazine*, October, 1941, Washington.
- Hill, Sir George, *The History of Cyprus*, Cambridge University Press, Cambridge.
- Hyatt, J. Philip, "Ras Shamra Discoveries and the Interpretation of the Old Testament," *Journal of Bible and Religions*, May, 1942.
- Jack, J. W., *The Ras Shamra Tablets and Their Bearing on the Old Testament*, T. & T. Clark, Edinburgh.
- Kramer, S. N., *Sumerian Mythology*, The American Philosophical Society, Philadelphia.
- Manson, T. W., *A Companion to the Bible*, Thomas Nelson & Sons, New York.
- Marston, Sir Charles, *The Bible Comes Alive*, Ayre & Spotteswoode, London.
- McCown, C. C., *The Ladder of Progress in Palestine*, Harper & Brothers, New York.
- Murray, Margaret A., *Petra*, Blackie and Son, Ltd., London.
- Naville, Edouard, *The 11th Dynasty Temple at Deir el-Bahri*, Part I, Egyptian Exploration Fund, London.
- Nelson, Harold H., "Egyptian Temples," *Journal of Near Eastern Studies*, Vol. 2, Num. 1, January, 1943, University of Chicago Press, Chicago.
- Pendlebury, J. D. S., *Tell el-Amarna*, Lovat, Dickson and Thompson, London.
- Petrie, Hilda, *Side Notes on the Bible from Flinders Petrie's Discoveries*, Hutchinson & Co., Ltd., London.
- Pfeiffer, Robert H., *Introduction to the Old Testament*, Harper & Brothers, New York.
- Schaeffer, Claude F. A., *The Cuneiform Texts of Ras-Shamra-Ugarit*, Humphrey and Milford, London.
- Steindorff, George, and Seele, Keith, *When Egypt Ruled the East*, University of Chicago Press, Chicago.
- Thompson, Margaret, "Coins," *Hesperia*, July-September, 1942.
- Trumper, Victor L., *The Mirror of Egypt*, Marshall, Morgan, and Scott, London.
- Tufnell, Olga, and Inge, Charles, *The Fosse Temple*, Vol. II, Lachish, Oxford University Press for Wellcome-Marston Archaeological Research Expedition to the Near East.
- Turner, Ralph, *The Great Cultural Traditions*, Vol. 1, McGraw-Hill Book Company, Inc., New York.
- Wright, G. Ernest, "How Did Early Israel Differ from Her Neighbor?" *Biblical Archaeologist*, February, 1943.

MAPS OF BIBLE LANDS

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|-------------------------------------|---|
| The Ancient World | 8. Central Palestine (large scale) |
| The Lands of Bondage and Wanderings | 9. Southern Palestine (large scale) |
| Canaan at the Time of the Conquest | 10. Environs of Jerusalem (large scale) |
| The Kingdoms of Israel and Judah | 11. Palestine in the time of Christ |
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| Northern Palestine (large scale) | |

This series of maps contains the results of many years of research by Biblical scholars and chæologists, especially in the years since 1920 during which so many new discoveries have been made. The data have been carefully assembled by Dr. J. O. Boyd of the Society's staff and reviewed by Professor W. F. Albright, recently director of the American School of Oriental Research in Jerusalem.

The maps include with almost no exception all Biblical place names the location of which is well-established. Of some others, entered with "?", the location is probable but not fully assured. A few doubtful locations are indicated by "??".

Where the same name belongs to two or more sites, these are distinguished in the Index by the use of small superior figures: e.g., Antioch¹ (in Pisidia), Antioch² (in Syria). The words "other refs" added to the latter mean that all references to Antioch except the four listed under Antioch¹ belong under Antioch².

On the maps non-Biblical names of cities or areas are in italic type; such names of seas and rivers are also in parentheses. In the Index all non-Biblical names are in italic type.

Bold type figures refer to the number of the map; lighter numbers, as "E-1," to the squares of the map indicated by corresponding letters and numbers on the margins. Names listed without map references are of uncertain location.

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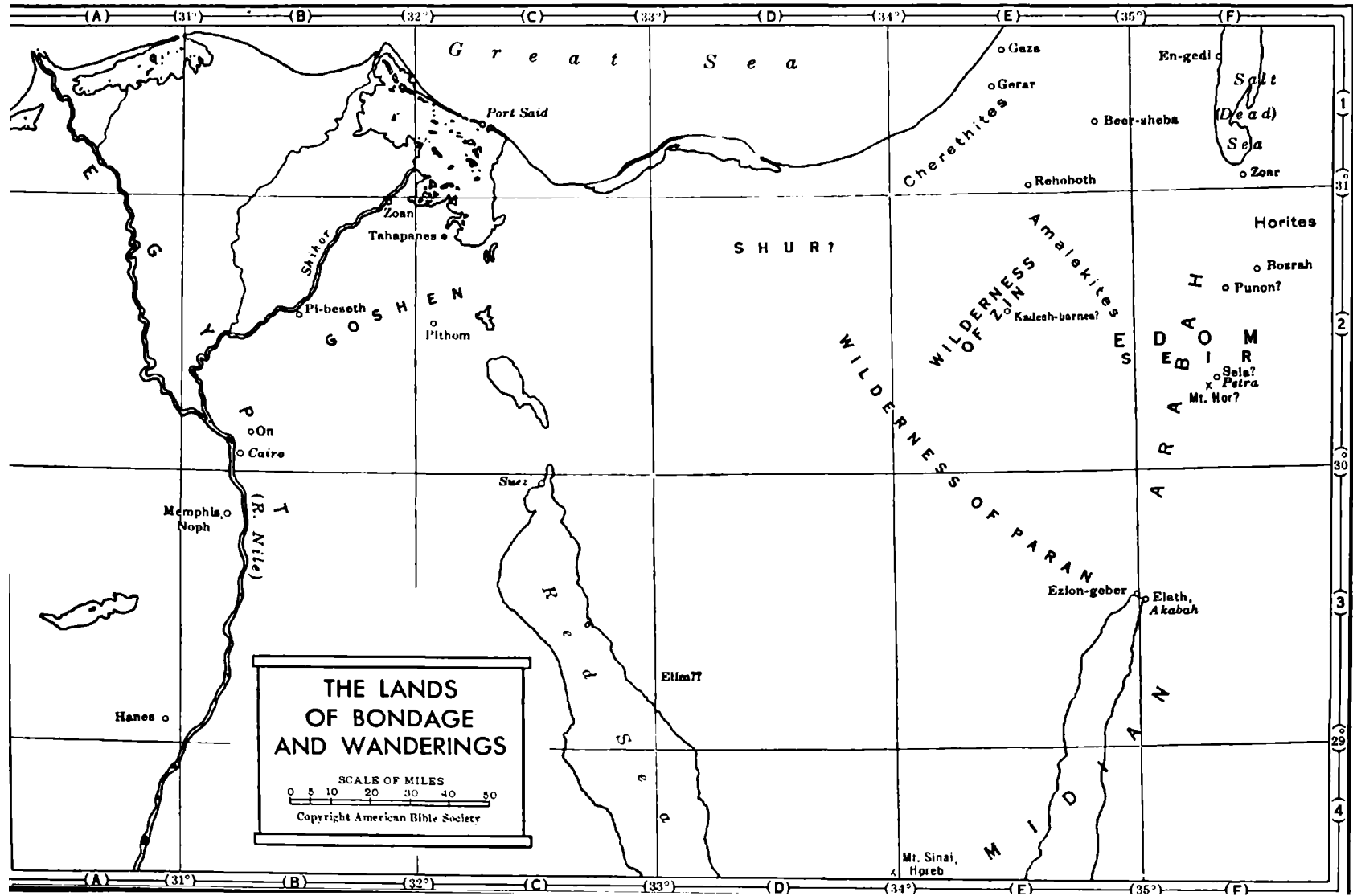
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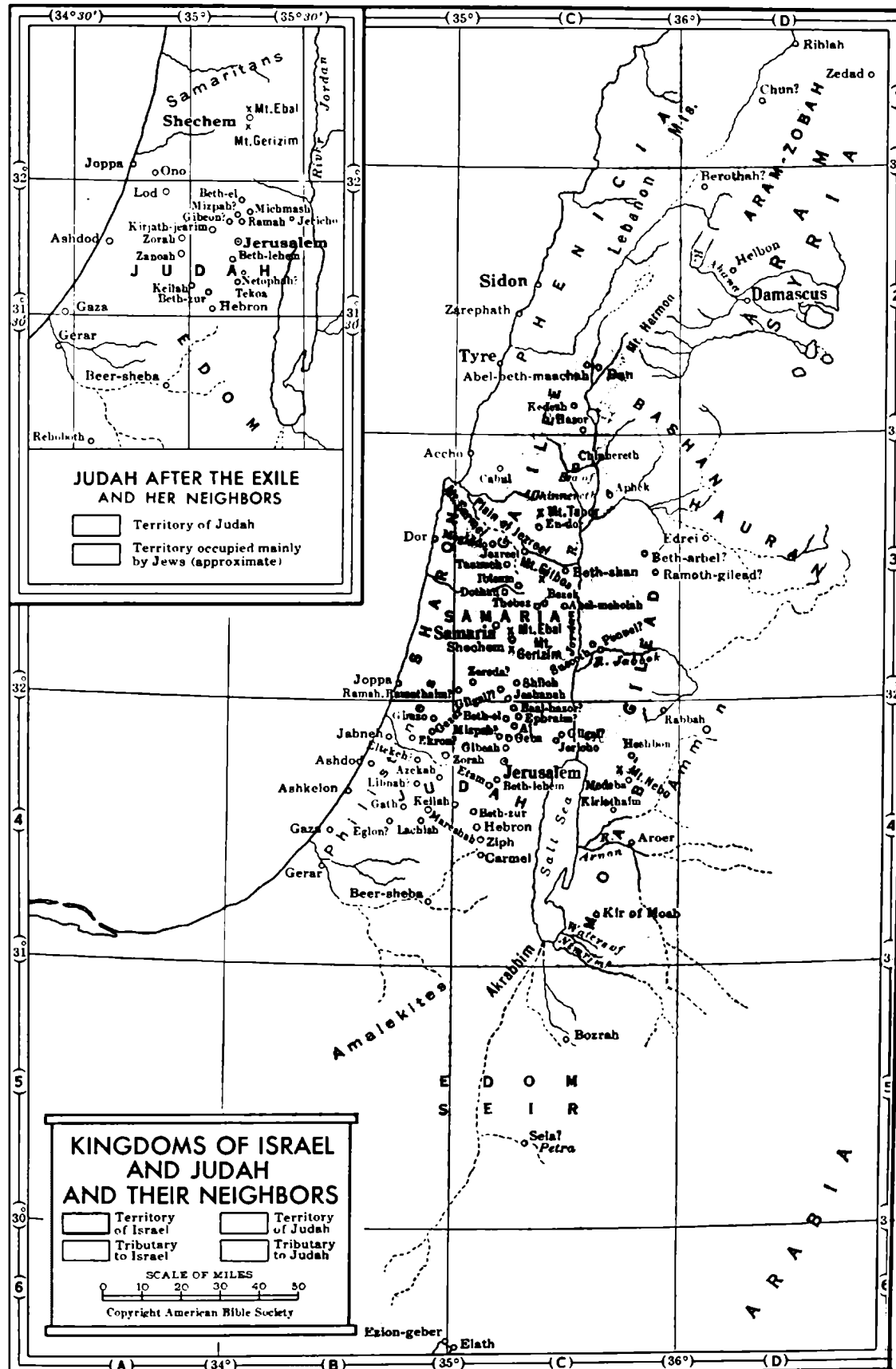
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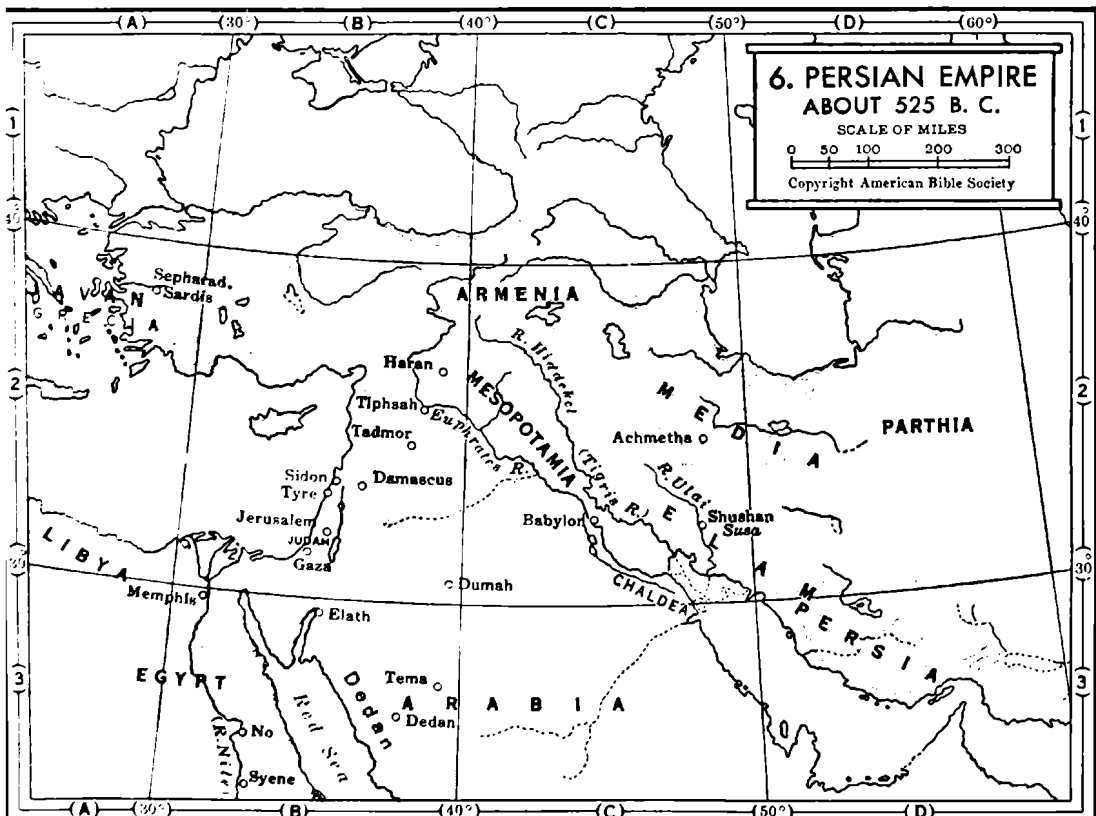
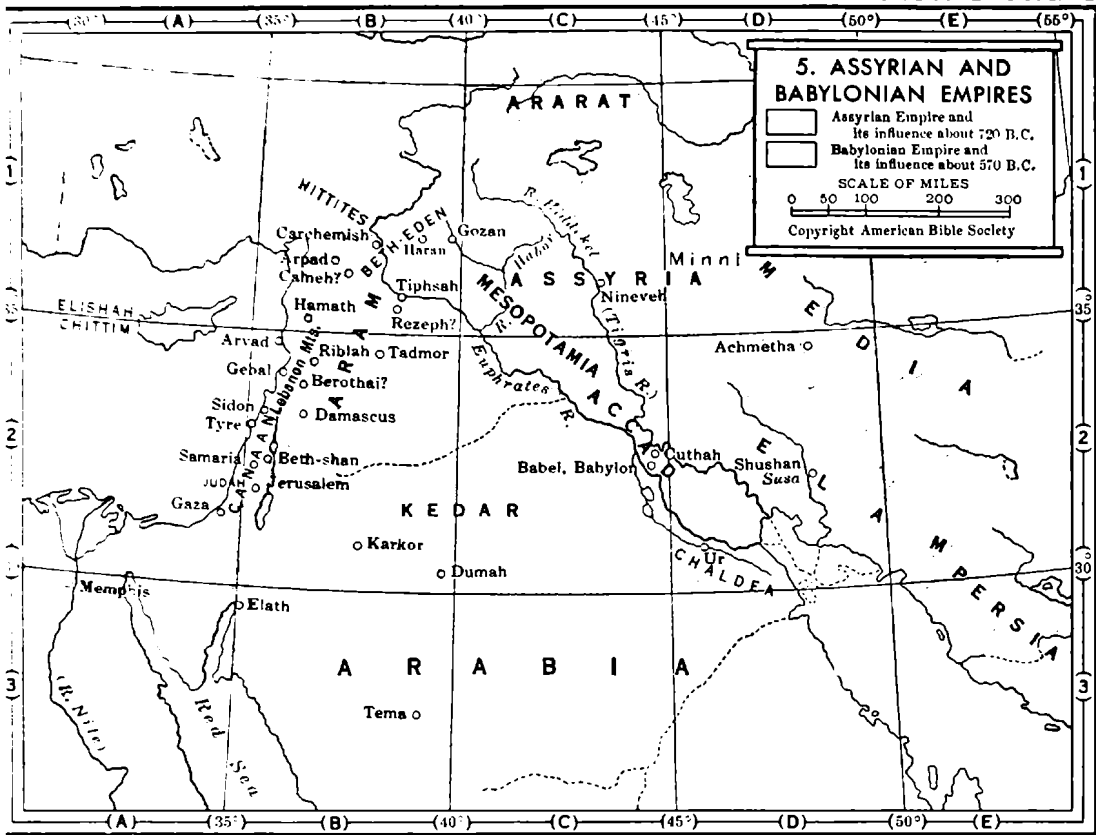
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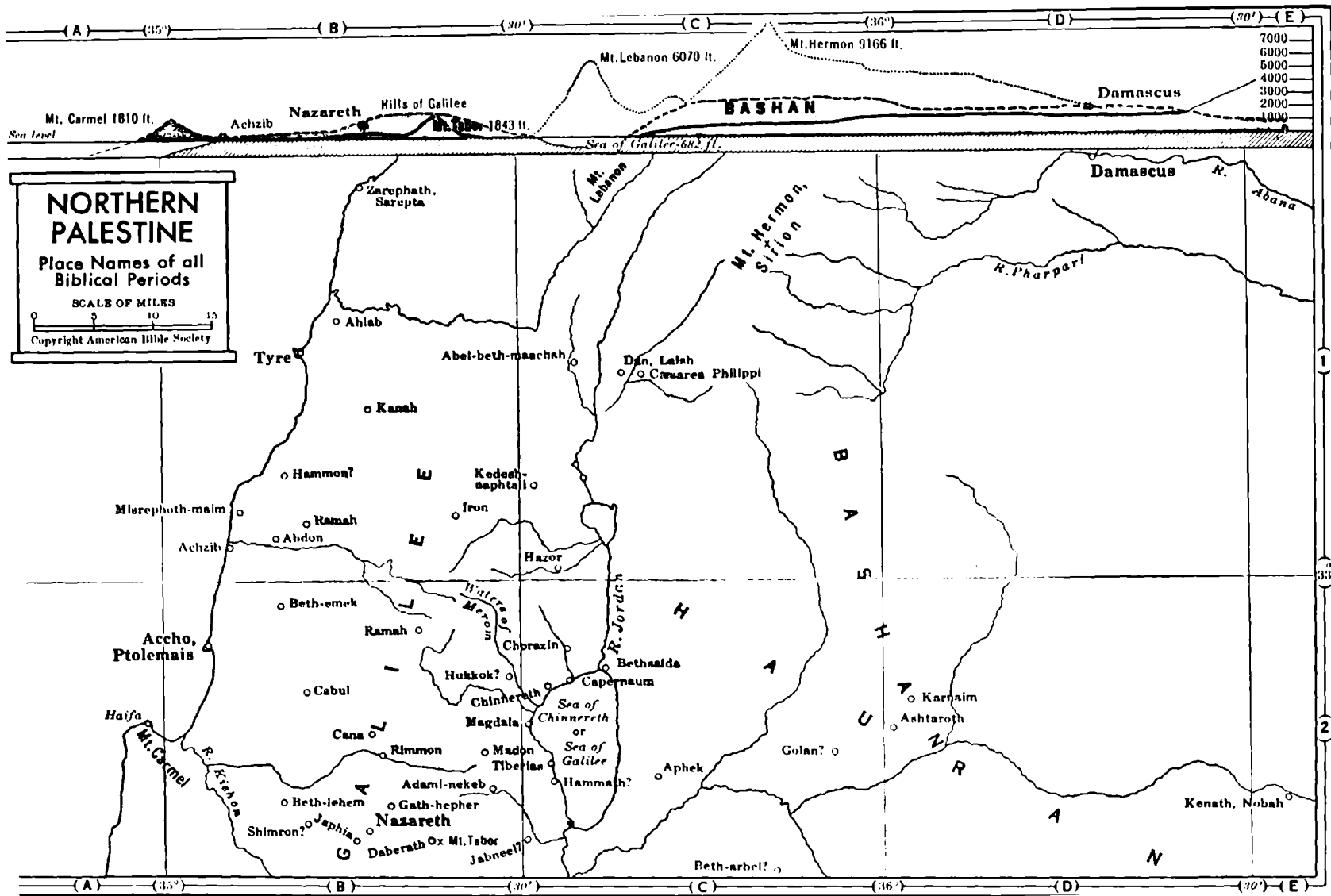
Mizraim (Egypt)	1 D-3	Ramah ⁴ , Ramathaim-zophim,	Sina, Sinai (Mt.) (Horeb)	2 E
Moab, Moabites	3 B-4, 4 C-4, 9 D-2	(1 Sam) (Arimathea)	Sion ¹ (Mt.) (Deut 4:48), see Hermon (Mt.)	7 C
Moladah	9 C-2	Ramah ⁵ (other refs)	Sion ² (other refs), see Zion on	1
Moresbeth-gath	9 B-1	4a, 8 B-3, 10 C-1	Sirion (Mt. Hermon)	12 E
Moriah (Mt.)	13, 14	Ramoth ¹ (1 Chr 6:73)	Smyrna	12 E
Mozah	9 C-1, 10 B-2	Ramoth ² (1 Sam 30:27)	Sochoh	8 B
Myra	12 F-2	Ramoth ³ (other refs), Ramoth-gilead (Ramah)	Socoh ¹ (Jos 15:48)	9 B
Myia	12 E-2	4 C-3, 8 C-2	Socoh ² (Jos 15:35) see Shochoh	10 A
Naaran, Naarath	8 B-3, 10 D-1	Red Sea	Sorek, valley of	3 B-3, 4 C-3, 8 C
Nain	8 B-1, 11 B-2	1 D-3, 2 C-3, 5 A-3, 6 B-3	Sychar (Shechem?)	8 B-2, 11 B
Naphtali tribe	3 B-3	Rehob (Beth-rehob)	Sychem see Shechem on	3 B
Nazareth	7 B-2, 8 B-1, 11 B-2	8 D-2	Syene (Aswan)	1 D-3, 6 B
Neapolis	12 D-1	Rehoboth ¹ (Gen 26:22)	Syracuse	12 B
Nebo ¹ (Ez, Neh)		2 E-1, 3 A-4, 4a, 9 B-2	Syria (Aram)	4 D-2, 12 G
Nebo ² city, mount (other refs)	3 B-4, 4 C-4, 9 D-1	Rehoboth ² (Gen 10:11) at Nineveh	Syria-damascus see Damascus	
Nekeb see Adami-nekeb		Rehoboth ³ (Gen 36:37)	Syria-maachah see Abel-beth-maachah on	4 C
Nephthalim see Naphtali		Remmon see Rimmon ²	Syrophenician see Phenicia on	11 B
Nephtoa	9 C-1, 10 C-2	Remmon-methoar see Rimmon ¹	Taanach	3 B-3, 4 C-3, 8 B
Netophah	4a, 9 C-1, 10 C-2	Rephaim, valley of	Taanath-shiloh	8 B
Nezib	9 B-1, 10 A-3	Reuben tribe	Tabor ¹ plain (1 Sam 10:3)	
Nicopolis	12 C-2	Rezech	Tabor ² city (Jos 19:22; Jud 8:18; 1 Chr 6:77)	
Nile, R.	1 D-3, 2 B-3, 5 A-3, 6 B-3	Rhegium	Tabor ³ (Mt.) (other refs)	3 B-3, 4 C-3, 7 B-2, 8 B-1, 11 B
Nimrah see Beth-nimrah		Rhodes	Tadmor	5 B-2, 6 B
Nimrim, waters of	4 C-4, 9 D-2	Riblah	Tahapanes, Tahpanhes	2 C
Nineveh	1 E-2, 5 C-1	Rimmon ¹ (1 Chr 6:77)	Tanach see Taanach	12 G
No (Luxor)	1 D-3, 6 B-3	Rimmon ² (other refs), see En-rimmon on	Tarsus	12 G
Nobah (Kenath)	7 E-2	Rimmon ³ , rock (of) (Jud 20 & 21)	Telaphneches see Tahapanes	
Noph (Memphis)	2 B-3	8 B-3, 10 C-1	Tekoa, Tekoah	3 B-4, 4a, 9 C-1, 10 C
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Ono	4a, 8 A-2	Salamis	Thehallonika	12 D
Ophel	13, 14	Salcah, Salchah	Thimnathuh see Timnath ²	
Ophrah ¹ (Jud)		Salem see Jerusalem	Three Taverns	12 A
Ophrah ² (other refs), (Ephraim ¹ , Ephraim)	3 B-4, 8 B-3, 10 C-1	Salim (Shalem)	Thyatira	12 E
Padan, Padan-aram	1 D-2	Salmon cape	Tiberias ¹ city	7 C-2, 11 B
Palestina, Palestine	7, 8, 9, 11, 12 G-4	Salt Sea (Dead Sea)	Tiberias ² , Sea of (Sea of Galilee or of Chinnereth)	11 B
Pamphylia	12 F-2	4 C-4, 9 C-2, 10 E-2, 11 B-3	Tigris, R.	1 E-2, 5 C-1, 6 C
Paphos	12 F-3	Samaria ¹ city	Timnah ¹ , Timnath ¹ (Gen; Jos 15:57)	3 B-4, 9 C
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Parthia, Parthians	6 D-2	4 C-3, 4a, 8 B-2, 11 B-2	Tiphshah ¹ (1 Ki 4:24)	5 B-1, 6 B
Patara	12 E-2	Samos	Tiphshah ² (2 Ki 15:16)	8 B
Pathros, Pathrusim	1 D-3	Samothracia	Tirzah	11 C
Patmos	12 D-2	Sansannah	Trachonitis region	12 D
Peniel, Penuel	3 B-3, 4 C-3, 8 C-2	Sardis (Sephared)	Troas	12 E
Peor (Beth-peor)	3 B-4, 9 D-1	Sarepta (Zarephath)	Trogyllium	12 E
Peraz region	11 B-3	7 B-1, 11 B-1	Tubal people	1 D
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Persia	5 E-3, 6 D-3	Scythopolis (Beth-shan)	Ur (of the Chaldees)	1 E-2, 5 D
Pharpar, R.	7 D-1	8 B-2, 11 B-2	Zabulon see Zebulun	
Phenice ¹ (Acts 27:12)	12 D-3	Seir ¹ (Mt.) (Jos 15:10)	Zanoah ¹ (Jos 15:56)	
Phenice ² , Phenicia (other refs)	3 B-2, 4 C-2, 11 B-1, 12 G-3	Seir ² (Edom, Idumea) (other refs)	Zanoah ² (other refs)	4a, 9 B-1, 10 A
Philadelphia	12 E-2	Sela, Selah	Zareah see Zorah	
Philippi ¹ (Mat 16:13; Mk 8:27) see Caesarea Philippi		Seleucia	Zarephath (Sarepta)	4 C-2, 7 B
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Philistia, Philistim, Philistines	3 A-4, 4 B-4, 9 B-2	Sephared (Sardia)	Zedad	4 D
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Pi-beseth	2 B-2	Sharon ¹ (1 Chr 5:16)	Zidon see Sidon	
Pirathon	8 B-2	Sharon ² plain (other refs)	Zin, wilderness of	2 E
Pisgah mount (Nebo ²)	3 B-4, 9 D-1	3 A-3, 4 B-3, 8 A-2, 11 A-2	Zion	13, 14
Pisidia	12 F-2	Sheba ¹ (Jos 19:2)	Zior	9 C-1, 10 B
Pithom	2 C-2	Sheba ² (other refs), Sabeans people	Ziph ¹ (Jos 15:24)	
Pontus	12 G-1	1 E-4	Ziph ² (other refs)	4 C-4, 9 C
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		2 D-2		
		Shushan		
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		3 B-3		
		Sidon		
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		5 A-2, 6 B-2, 11 B-1, 12 G-3		
		Sihor see Shihor on		
		2 B-2		
		Siloah, Siloam, pool of		
		13, 14		
		Simeon tribe		
		3 A-4		

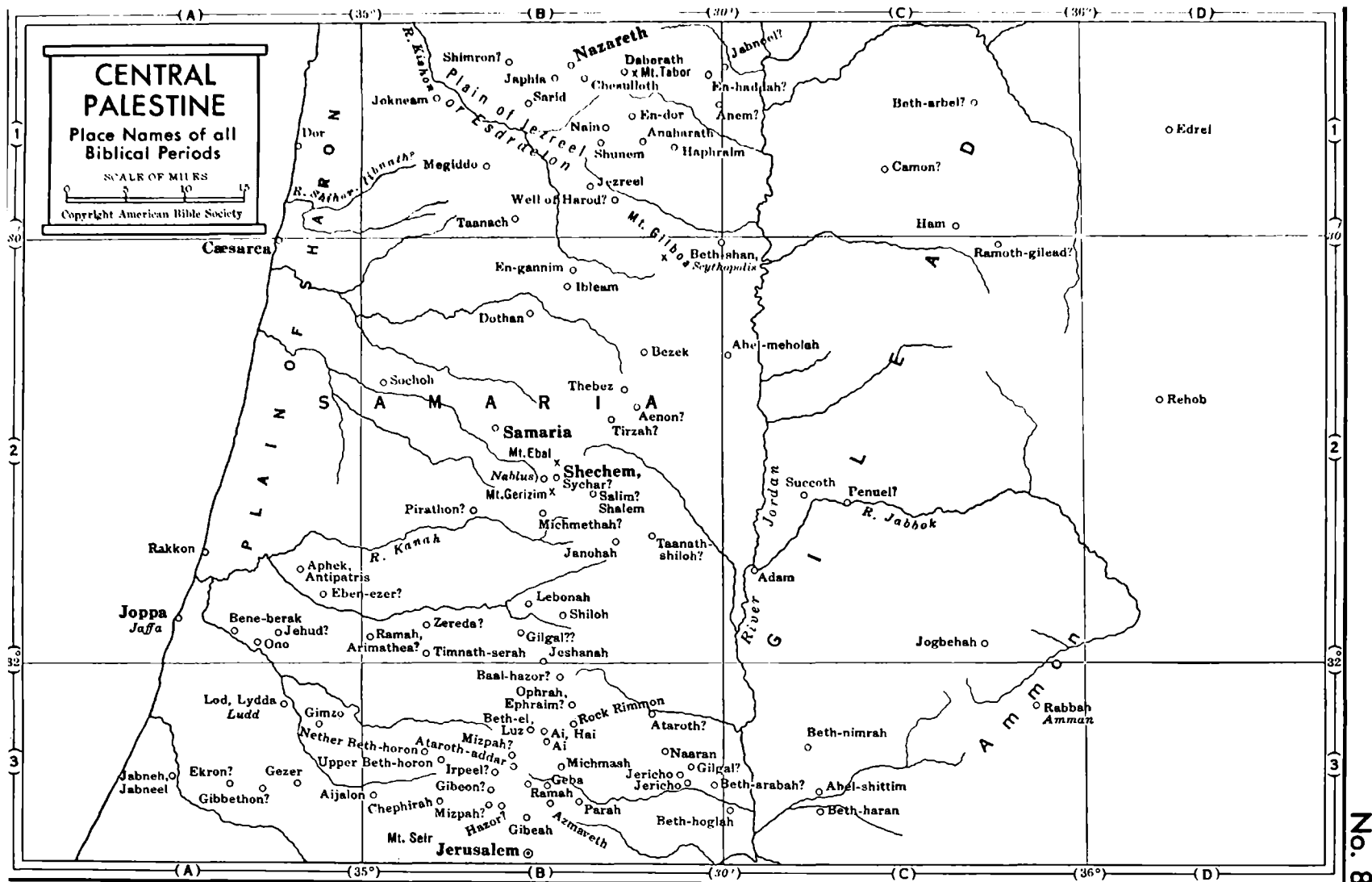


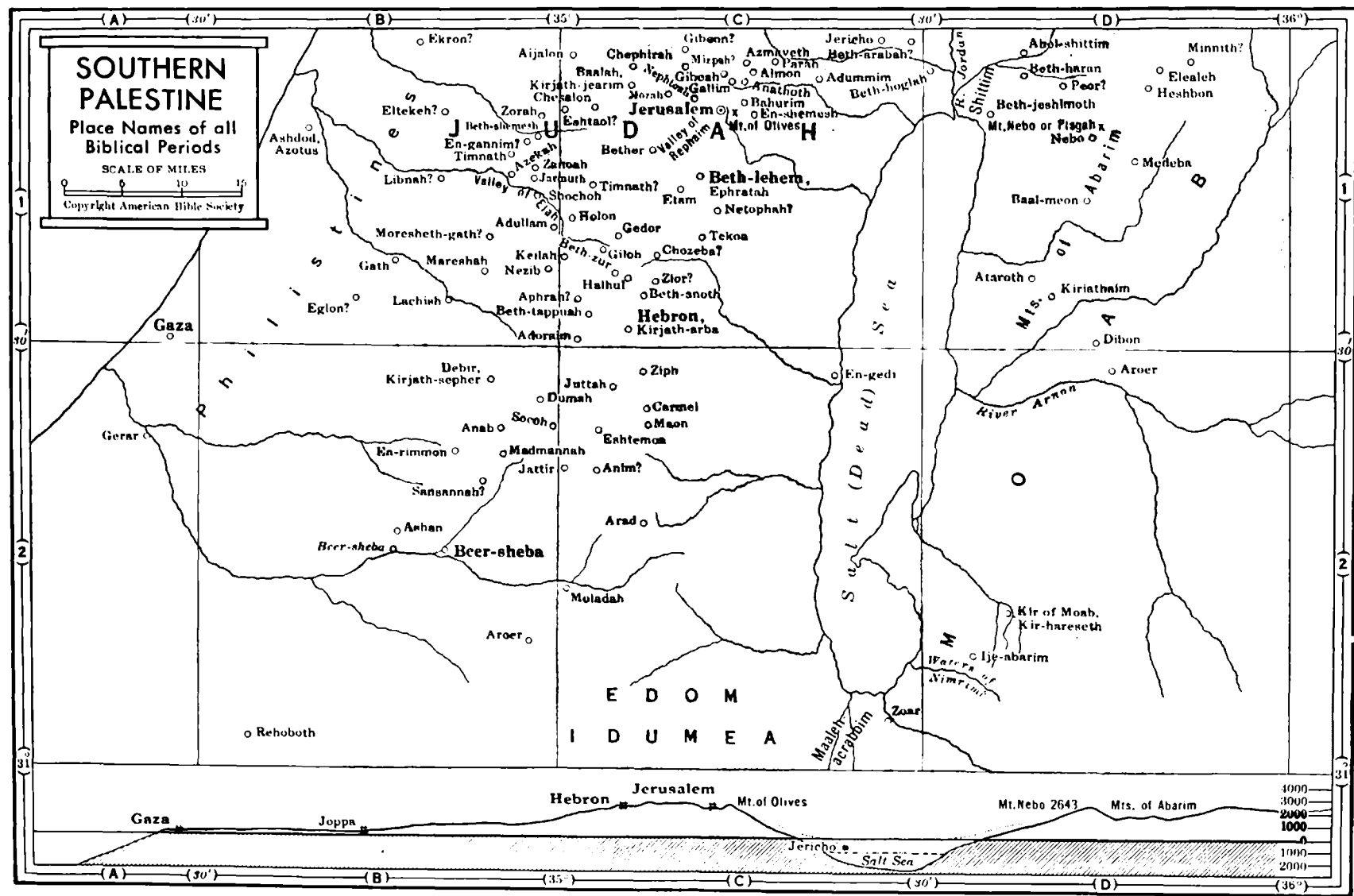


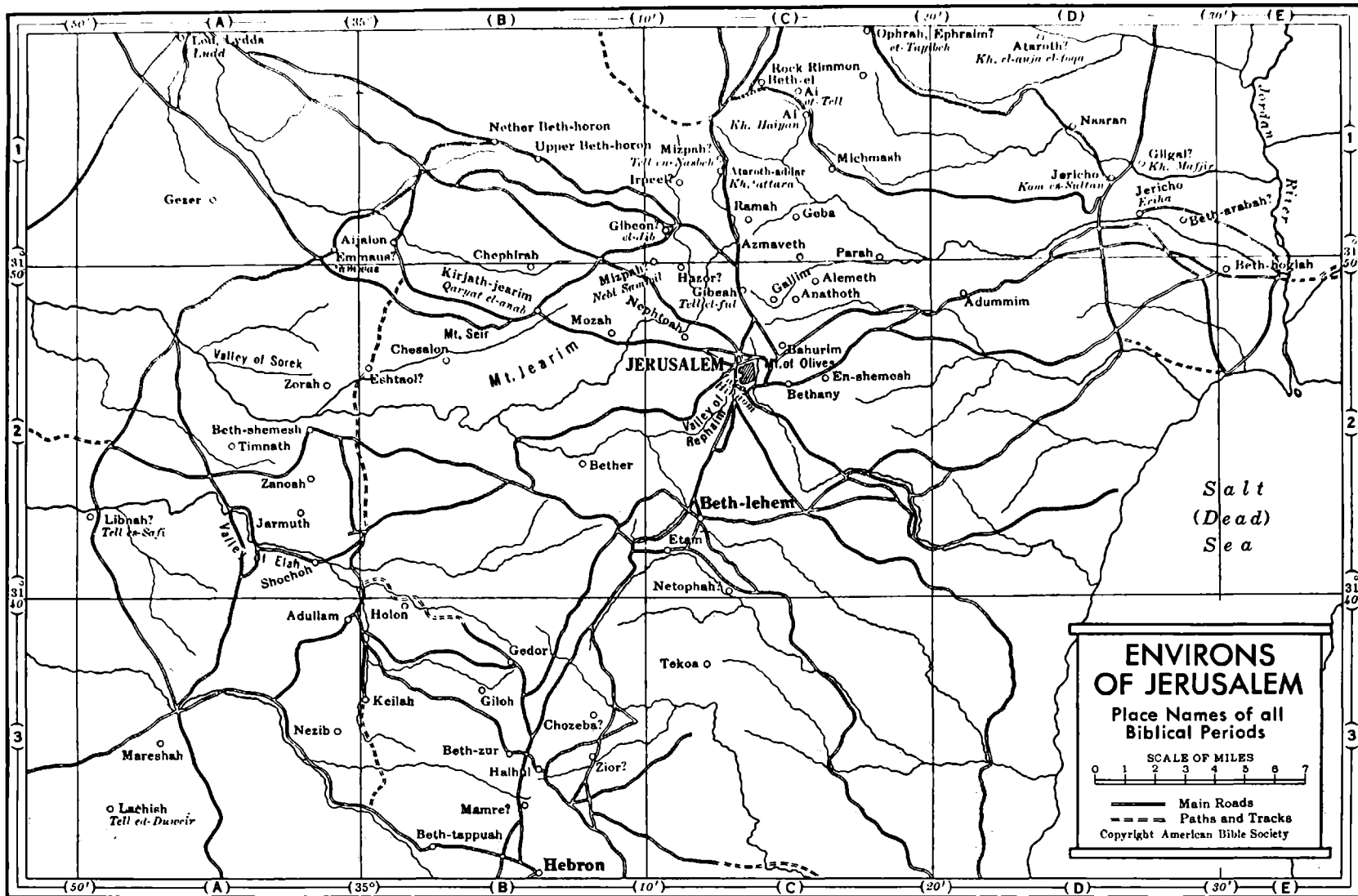


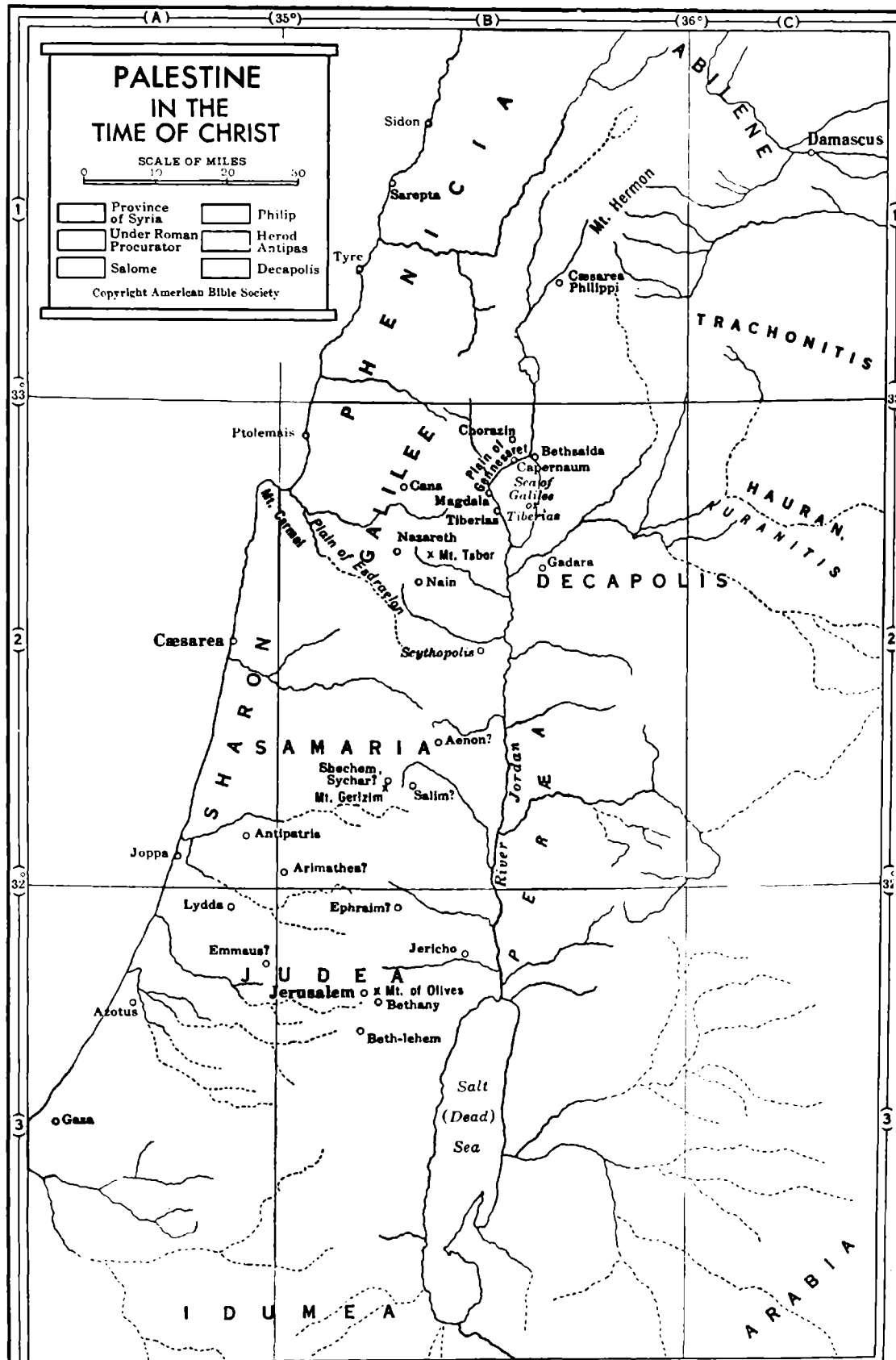


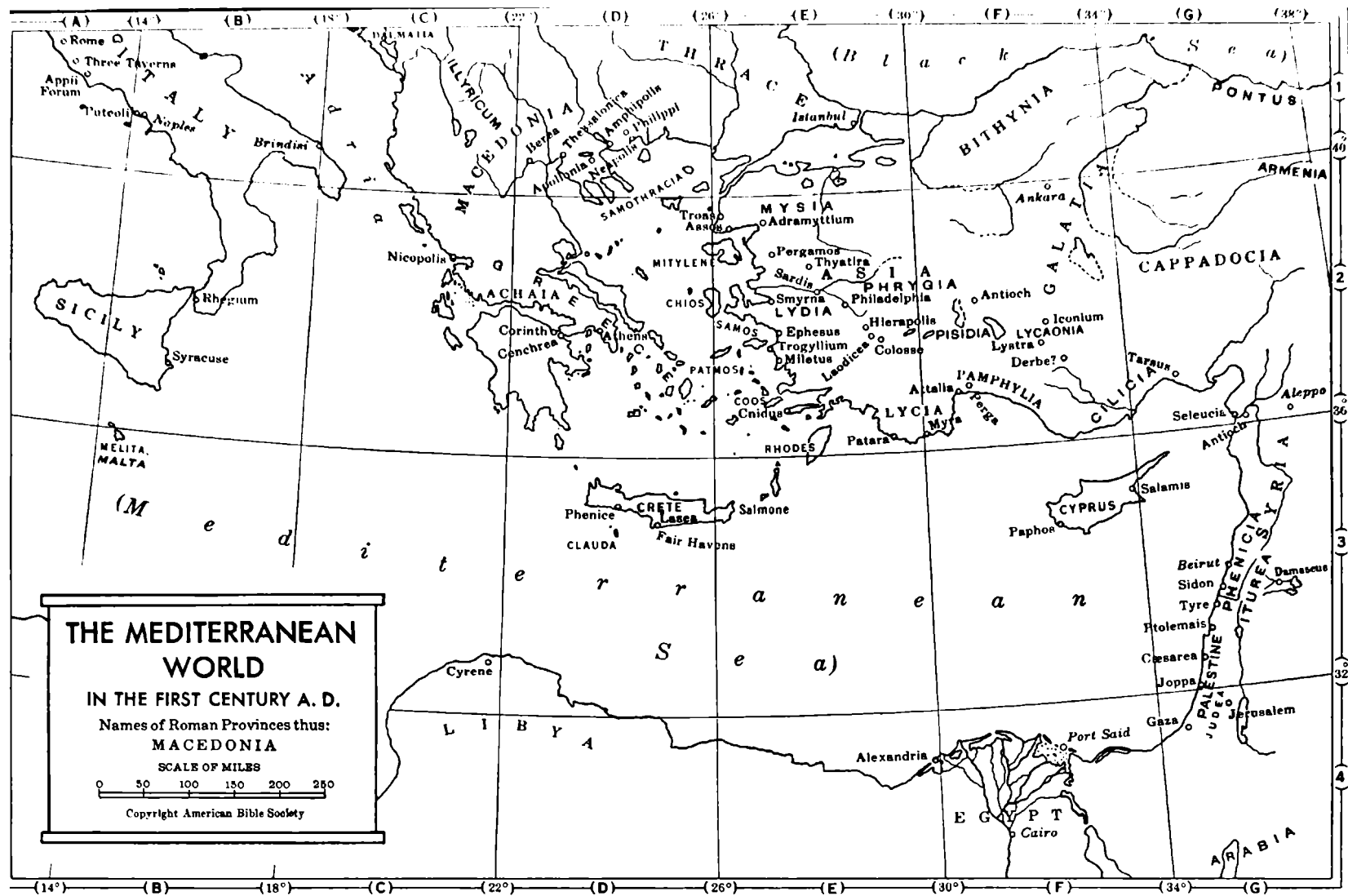








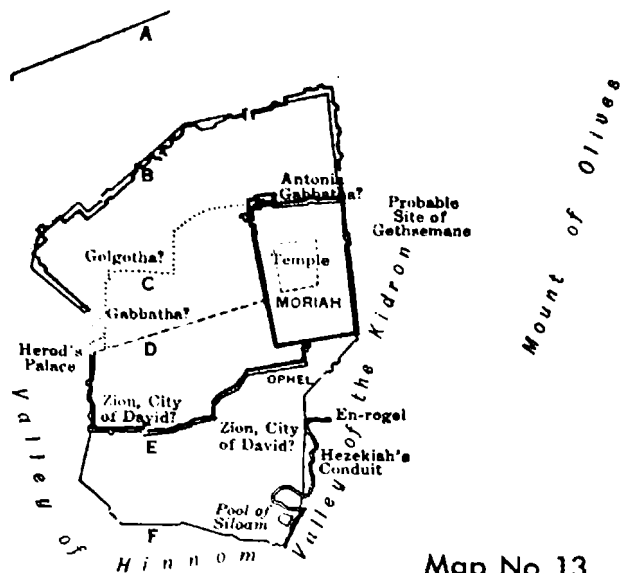




- A - Excavated Part of Wall built by Agrippa about 40 A. D.
B - Wall built by Hadrian about 130 A. D.
C - Probable Line of Second Wall built by Herod the Great between 37 and 4 B. C.
D - Approximate Line of First Wall built by Herod the Great between 37 and 4 B. C.
E - Approximate Line of Hadrian's South Wall.
F - Line of Herod's South Wall.

Ancient Walls

Modern Walls

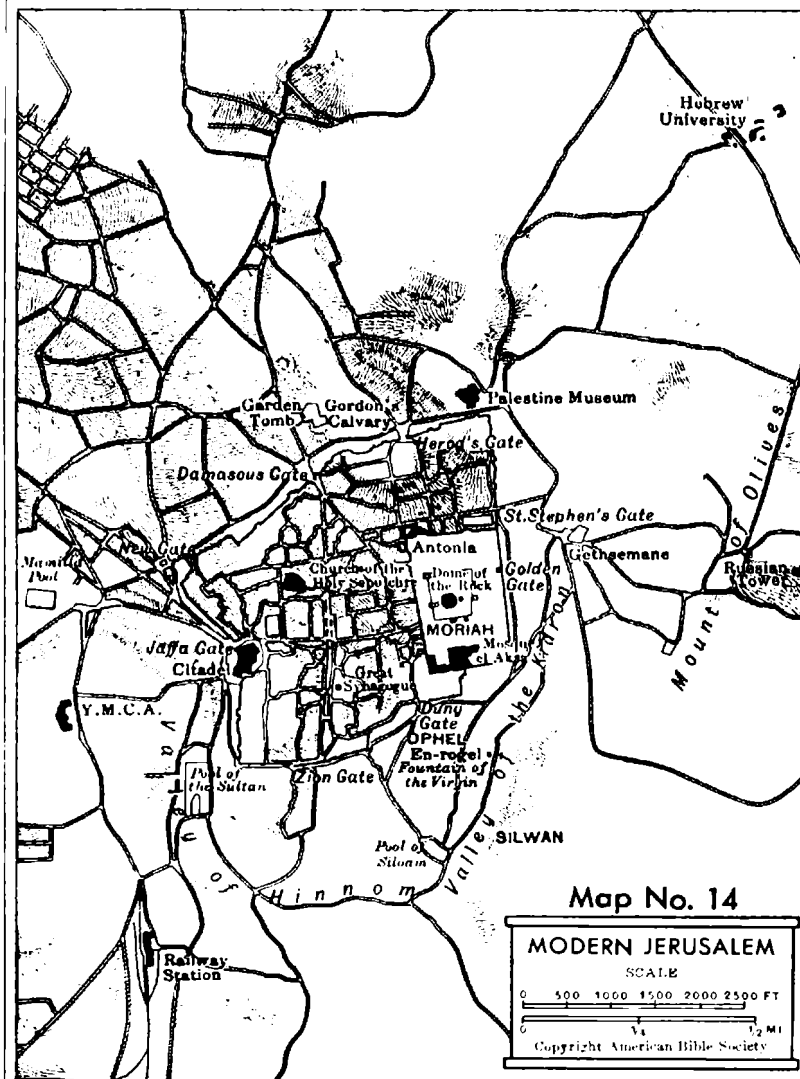


ANCIENT JERUSALEM

Names of sites not well identified are omitted.

For scale, see next map.

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MODERN JERUSALEM

SCALE

0 500 1000 1500 2000 2500 F

[illegible]

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DATE PEGS

The following tables represent many dates that are only approximate. Scholars are in constant disagreement. Authorities change their dates, from year to year, for events upon which new light is shed by current explorations. We venture to offer a few date pegs upon which our readers may hang their thinking as they orient themselves through the various sections of the *Encyclopedia of Bible Life*.

ARCHAEOLOGICAL PERIODS

(based on Nelson Glueck, *The Other Side of the Jordan*)

Before 10,000 B.C.	Paleolithic
c.10,000-4500 B.C.	Mesolithic (Natufian, of Carmel, etc.)
c.4500-3000	Chalcolithic (Ghassulian)
c.3000-1200	Bronze
c.1200-300	Iron (including Israelite-Edomite)
c.300-63	Hellenistic
63 B.C.-A.D. 323	Roman (including Nabataean and Thalmudic)
A.D. 323-636	Byzantine
1096-1291	Crusader

EPIGRAPHIC DATE PEGS FOR INTRODUCTION OF SCRIPT

(after Albright)

<i>Material</i>	<i>Minimum</i>	<i>Probable</i>	<i>Maximum</i>
Ras Shamra alphabet	15th cent. B.C.	?	?
tablets	14th cent.	15th-14th cent.	
Proto-Sinaitic alphabet	16th cent.	18th cent.	?
Byblos pseudo-hieroglyphic script	21st cent.	23rd-22nd cent.	?
copper stripe	20th cent.	22nd-21st cent.	?
Phoenician alphabet	developed probably from proto-Sinaitic alphabet, oldest legible inscriptions 14th cent.-13th cent. Greek alphabet derived from Phoenician.		
Ahiiram sarcophagus	10th cent.	late 11th cent.	11th

EGYPT

(abridged from *When Egypt Ruled the East* by Steindorff and Seele, courtesy of University of Chicago Press)

Prior to 3200 B.C.	Prehistoric Period
3200-2800	Protodynastic Period
3200-2800	1st and 2nd dynasties. King Menes (2900 B.C., Albright)

2800-2250	Pyramid Age. 4th Dynasty pharaohs—Khufu (Cheops), Khafre (Cephren), and Menkaure build Great Pyramids of Gizeh
2250-2000	First Intermediate Period
2000-1780	Middle Kingdom. 12th Dynasty, with capitals in Memphis and the Fayyum. Among kings, Senwosret I-III
1780-1546	Second Intermediate Period: invasion by Hyksos horsemen, 15th and 16th dynasties. Expulsion of Hyksos 17th Dynasty, 1730-c.1555 (Albright)
1546-1085	Golden Age, New Kingdom
18th Dynasty	
1546-1525 B.C.	Amenhotep I
1525-1508	Tuthmosis I
1508-1504	Tuthmosis II
1504-1482	Queen Hatshepsut
1482-1450	Tuthmosis III (alone, after jointly with Hatshepsut)
1450-1425	Amenhotep II
1425-1412	Tuthmosis IV
1412-1375	Amenhotep III, the Magnificent
1387-1366	Amenhotep IV (Akhenaton, monotheist, founds Amarna)
1366-1357	Tut-ankh-amun, restores worship of Amun
19th Dynasty	
1319-1318 B.C.	Ramesses I
1318-1299	Sethi I (moves capital to eastern Delta)
1299-1232	Ramesses II (may be pharaoh of Exodus)
1232-1200	Merenptah (defeats Israel before 1231 [Albright]); etc.
20th Dynasty	
1198-1167 B.C.	Ramesses III
954-924 B.C.	Sheshonk (Shishak) campaigns (Abingdon dates) versus Israel and Judah; sacks Jerusalem Temple in fifth year of King Rehoboam of Judah; destroys Solomon's Megiddo
332 B.C.	Alexander the Great conquers Egypt
323-30 B.C.	Ptolemies rule until Augustus makes Egypt a Roman province

THE LAND ALONG "THE RIVERS"

MOST ANCIENT BABYLONIA

5000-4000 B.C.	Deposits at Tepe Gawra
c.32nd cent.	Warka Period Babylonia
c.28th cent.	Early Dynastic I
c.25th cent.	Royal Tombs of Ur
c.2360-2180	Dynasty of Accad
c.1830-1550	Babylon 1 (2040-1750, according to some authorities)
c.1728-1686	Hammurabi
c.1690	Code of Hammurabi
Assyria (capital of Nineveh)	
842	Shalmaneser III makes 4th campaign vs. Damascus
745-727	Tiglathpileser III (first Assyrian king mentioned by name in Bible)
732	Fall of Damascus
722	Sargon II of Assyria carries several thousand Israelites captive

705	Sennacherib
668-626	Assurbanipal
625-538	Second Babylonian Empire
612	Nineveh falls to Medes and Babylonians
Chaldea	
612-538	(capital at Babylon)
604-561	Nebuchadnezzar
Persia (Achaemenian Line)	
538	Cyrus the Great (capital at Pasargadae); Jews return to Jerusalem under Zerubbabel
521	Darius I
485	Xerxes I (Esther?)
464	Artaxerxes (Malachi?)
333	Darius III defeated by Alexander the Great at Issus

GREECE

c.1100 B.C.	Trojan War (Stillwell)
c.800 B.C.	Greeks adopt Phoenician alphabet
776 B.C.	1st Olympiad begins dating of Greek history
c.750-700 B.C.	Colonies in Italy and Black Sea
c.700 B.C.	Homeric poems
Early 7th cent. B.C.	Greek coinage begins
600 B.C.	Attics paint pottery vases
540-527 B.C.	Pisistratus, Tyrant of Athens
490 B.C.	Battle of Marathon, Greeks defeat Persians under Darius
480 B.C.	Battle of Salamis, Xerxes defeated
460-438 B.C.	Golden Age of Greek culture (Phidias working on Parthenon, 447-438 B.C.)
333 B.C.	Alexander the Great defeats Darius III at Issus, north entrance to Syria, and spreads Greek culture throughout Middle East
146 B.C.	Greek freedom ends, with burning of Corinth by Rome

MINOAN CULTURE (CRETE)

(dating based on finds of Egyptian objects in Crete and of Cretan objects in Egypt)

3000-2200 B.C.	Early Minoan
2200-1600	Middle Minoan
1600-before 1100	Late Minoan

ITALO-ROMAN

12th cent. B.C.	Etruscans from eastern Mediterranean settle in Italy
9th cent. B.C.	Elegant art-metal work of Etruscans
500 B.C.	Roman patricians drive out Etruscans
2nd cent. B.C.-2nd cent. A.D.	Roman-Nabataean Age in eastern Palestine
67-62 B.C.	Pompey makes Syria a Roman province
48-44 B.C.	Dictatorship

Emperors

27 B.C.-A.D. 14

Caesar Augustus (Octavian) inaugurates Augustan Age of Peace—two centuries into whose midst Christ was born and the Christian Church founded

A.D. 14

Tiberius

37

Gaius

41

Claudius

54

Nero

68, 69

Galba, Otho, Vitellius

69

Vespasian crushes revolt of Jews. Palestine

70

Titus ravages Jerusalem, makes Judaea a Roman province

81

Domitian

96

Nerva

98

Trajan

117

Hadrian

138

Antoninus Pius

146

Rome dominates Corinth

161

Marcus Aurelius

168

Rome controls Egypt

313

Constantine the Great (first Christian emperor)

PALESTINE AND TRANSJORDAN

(after Albright, Glueck, Pfeiffer, and Abingdon Commentary)

c.1935

Abraham's migration from Ur

c.1728-1686 B.C.

Period of Hammurabi

c.1700 B.C.

Joseph in Egypt

c.1469-1436 B.C.

Khabiru (Hebrews?) menacing Canaanites

Sometime between 1475 and 1250 B.C.

Fall of Jericho to Hebrews

1413-1377 B.C.

Amarna Age

Sometime between 1320 and 1250 B.C.

Fall of Beth-el

c.1290 B.C.

Exodus of Hebrews from Egypt (Albright)

c.1230 B.C.

Fall of Lachish and Debir

Between c.1250 and 1195 B.C.

Conquest of Canaan

c.1235-1200 B.C.

Campaigns of Joshua

1150-1000 B.C.

Height of Philistine power

± 1125 B.C.

Battle of Taanach (Deborah's)

c.1085 B.C.

Samson

c.1065 B.C.

Eli

c.1045 B.C.

Samuel

THE UNITED HEBREW MONARCHY (Early Iron Age, 1200-900 B.C.)

c.1028

Saul

c.1013-973

David

c.973-933

Solomon

THE DIVIDED MONARCHY (after 933 or 930 B.C.)

Northern Kingdom (Israel)

Southern Kingdom (Judah)

Partial List of Kings and Prophets

c.933-912	Jeroboam I	c.933-917	Rehoboam
c.887-876	Omri	c.875-851	Jehoshaphat
c.876-854	Ahab	c.843-837	Athaliah
c.876-854	Elijah	c.837-798	Joash
c.853-842	Jehoram	c.780-740	Azariah (Uzziah)
c.850	Elisha	c.740-701	The First Isaiah
c.843-816	Jehu	c.725-690(?)	Micah
c.853-745	Jeroboam II	c.720-692	Hezekiah
c.760	Amos	700	Siloam Inscription: (see p. 430). Threat to Jerusalem by Sennacherib who makes Hezekiah his tributary
c.750-735	Hosea		
722	Sargon captures Samaria		
		c.638-608	Josiah
		c.627	Zephaniah
		c.615 or 608	Nahum
		c.626-585	Jeremiah
		c.605-600	Habakkuk
		c.608-597	Jehoiakim
		597	Jehoiachin into captivity at Babylon
		c.592-570	Ezekiel
597 B.C.			Lachish invaded by Babylonian army
588			Lachish destroyed by Nebuchadnezzar
588			Siege of Jerusalem begun, perhaps in January
588 (August) or 587 (August)			Temple destroyed, Jerusalem
586			Zedekiah flees
560			King Jehoiachin released from Babylon (Dubberstein)
538			Exile ends, with accession of Cyrus the Persian
c.520-516			Rebuilding Temple, Zerubbabel and Joshua
458			Ezra starts from Babylon to Jerusalem (or later than Nehemiah, according to some)
444			Nehemiah returns to Jerusalem
c.540			Deutero-Isaiah
c.520			Haggai and Zechariah
c.460			Malachi
c.460			Obadiah
c.397(?)			Ezra
c.350			Joel
333			Alexander the Great controls Palestine and Syria
c.166-63 B.C.			The Maccabean Period

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